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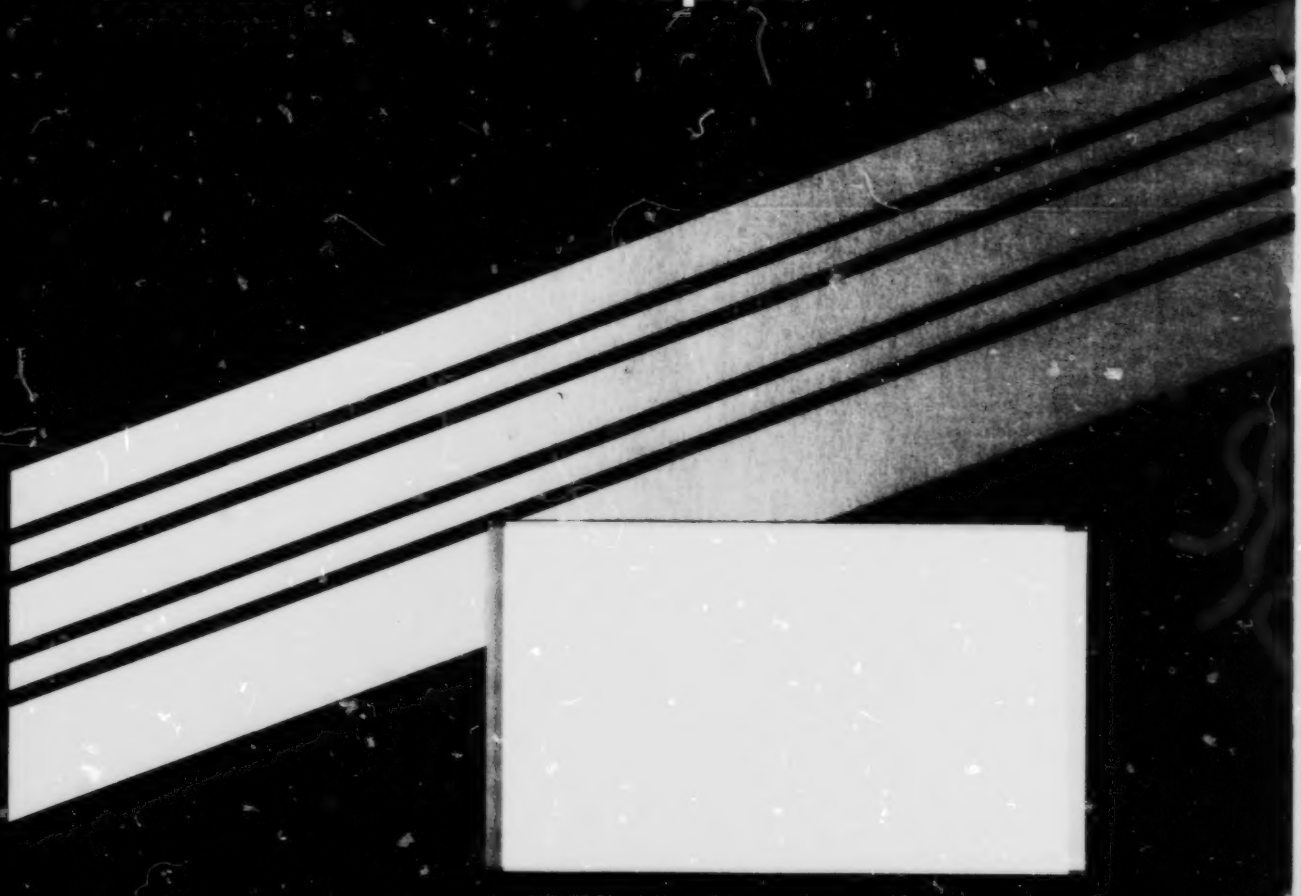

Solicitor General Canada
Ministry Secretariat

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THE VANCOUVER CONVENIENCE STORE ROBBERY PREVENTION PROGRAM: FINAL REPORT

NO. 1985-42

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This working paper is available in French. Ce document de travail est disponible en français.

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INTRODUCTION

As defined in the Canadian Criminal Code (1981: Sec.302), a robbery offence is committed when anyone:

(a) steals, and for the purpose of extorting whatever is stolen or to prevent or overcome resistance to the stealing, uses violence or threats of violence to a person or property;

(b) steals from any person and, at the time he steals or immediately before or immediately thereafter, wounds, beats, strikes or uses any personal violence to that person;

(c) assaults any person with intent to steal from him; or

(d) steals from any person while armed with an offensive weapon or imitation thereof. 1953-54, c.51, s.288.

Section 303 of the Criminal Code further states that, with respect to punishment for robbery, "[e]very one who commits robbery is guilty of an indictable offence and is liable to imprisonment for life." 1953-54, c.51, s.289; 1972, c.13, s.70.

Although robbery of convenience stores, in magnitude and monetary loss, is not as significant a problem as are other types of theft, such as shoplifting, employee theft, fraudulent cheques, or break and enter, it is nevertheless an important and unique type of crime (Kingsbury, 1973). While the incidence of robbery may not be as high as that of other types of officially recorded crime, its rate of increase and average loss in several U.S. and Canadian cities has continued to climb over the past five years (see Tables 1 & 2).

Robbery is also important because it is a potentially violent crime involving psychological and physical trauma to the victim(s). The fear and threat of robbery to commercial retailers has in part been reflected in the increasing number of measures retailers have taken to reduce their chances of being victimized. Some of the steps that retailers have taken include: installation of alarms, reduced operating hours, and for some, even arming themselves as a precautionary measure against a possible robbery. Until fairly recently, however, there were no organized efforts to assist businesses in addressing the issue of preventing robberies.

In 1981, the Solicitor General's Department funded a Robbery Information Program (RIP) for the Vancouver City Police. The program was initiated in response to a community plea for assistance after a number of robberies involving injuries to a store employee had taken place.

This report presents the final analysis of the implementation and impact of the Vancouver Robbery Information Program. In addition, suggestions as to the future use and implementation of similar programs elsewhere across Canada are offered. The first part of the report presents a general overview about the extent, nature and consequences of robbery in Canada and the U.S., with specific emphasis on Vancouver. Part II will include a survey of the relevant literature to date. This will be followed by a description of the implementation and present operation of the RIP. Part IV summarizes the empirical component of the study. The final section of this report offers a series of recommendations for the future operation of the RIP.

I. NATURE OF ROBBERY IN NORTH AMERICA

Robbery in North America has generally become so familiar that every year across North America, literally thousands of people suffer emotional trauma and sometimes physical injury, for the robbery of--by almost any standard--trivial sums of money (Cook 1983).

This section will briefly review and illustrate, by comparing crime figures for certain cities, the extent to which robbery has dominated violent crime statistics in both Canada and the United States.[1] Specific attention will be directed to the robberies in Vancouver (both generally and for convenience stores), as it is the study site.

No attempt is made to control for any discrepancies in reporting patterns or to identify any particular robbery prevention programs, or police practices, which may have created some kind of "spin-off" effect on reporting incidence among the cities. For the purposes of illustration we will simply note the different robbery rates among certain cities in the two countries.

Another area of interest discussed in this section is the general reliability of official statistics. While much criticism has been expressed about crime reporting and official crime statistics (Cicourel, 1968; Herbert, 1982; Robison, 1937), the concern of this report is not so much with the accuracy of the data, but with the general impression one gets when surveying the figures in Tables 1 & 2.

---

1 The U.S., being our closest neighbour, is used for comparative purposes. While there are certain legal differences in the offence of robbery between the two countries, the comparison is primarily intended to illustrate the seriousness of robbery in North America and to show that while robbery is increasing in Canada, it is not as serious a situation as that of most U.S. cities.

In Canada, the Uniform Crime Reporting Manual issued to police forces by Statistics Canada encourages users of such data to interpret them as mere representative indicators of the "actual" crime rates. As is to be expected, there will always be certain types of crime that go largely unreported (rape, petty theft, unlawful entry with no loss of property, damage to property not insured, etc.). Robberies of convenience stores, financial institutions or other service establishments however, tend not to fall into this group.[2] The reliability of robbery statistics is supported by a number of victimization studies (e.g., Biderman et al., 1967; Hindelang, 1976). In fact, many victimization studies do not even bother to sample businesses anymore for discrepancies between their reporting rates and the actual incidents of robbery. Therefore, we can look upon the figures in Tables 1 & 2 with less skepticism.

Robbery Trends among Canadian and United States Cities

In Canada, as shown in Table 2, Montreal has had the highest robbery rate in the country since 1977, more than twice that of any other major Canadian city (also see Normandeau & Bellemare, 1981; Normandeau, 1983). When compared to a number of American cities (see Table 1), Montreal has a lower robbery rate than Chicago, Detroit, Los Angeles, and New York which are some of the United States' highest crime cities; yet it is higher than that of Montgomery, Seattle, or Anchorage - "average" crime rate cities.

Figure 1 presents the U.S. Crime Clock for the years 1977 through 1981. Although the times are based on aggregate figures for each year, it can be

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2 It should be noted, however, that official robbery statistics are not classified according to location.

Figure 1

U.S. Crime Clock: 1977-1981

1 Crime every 2,2,3,3,3, secs.*	1 Violent Crime 24.24.27.30,31, secs.	1 Murder every	23,23,24,27,27, mins.
		1 Forcible rape every	6,6,7,8,8, mins.
		1 Robbery every	55,58,68,76,78, secs.
		1 Aggravated Assault every	49,48,51,57,60, secs.
	1 Property Crime every 3,3,3,3,3, secs.	1 Burglary every	8,8,10,10,10, secs.
		1 Larceny every	4,4,5,5,5, secs.
		1 Motor vehicle theft every	29,28,29,32,33, secs.

Source: UCR: Department of Justice, Washington, D.C. 1977-1981.

*Times noted in each category are in decending order; 1981 to 1977.

Figure 2

B.C. Crime Clock: 1981-1982

1 Crime every 1.5,1.5,min.	1 Violent Crime every 17,18, mins.	1 Murder or attempt every	32,39, hrs.
		1 Sexual offence every	35,40, hrs.
		1 Assault every	22,22, min.
		1 Robbery every	2,3, hrs.
	1 Property Crime every 2.5,2.4, mins.	1 Burglary every	95,10,mins.
		1 Theft (over & under $200) every	41,39, mins.
		1 Possession of stolen property every	4,4, mins.
		1 Fraud every	30,29, mins.

Source: B.C. Police Commission Annual Report 1981/82, 1982/83.

*Times noted in each category are in decending order 1982-1981.
No other data were available to expand the time period.

seen that the rate of property crime has remained stable over the past five years (1 property crime every 3 seconds), yet the time between violent crime incidents is steadily decreasing. Robberies reflect the time trend of violent crimes, indicating that the rate of robbery incidents has also increased. It can be further noted in Figure 1 that robbery in the United States is second only to aggravated assault as the most frequently occurring violent crime.

While no crime clock is available for Canada, the B.C. Police Commission includes one for the Province in their annual crime statistics. Although not directly comparable to the national trend, it is apparent from Figure 2 that the incidence of crime in B.C. is considerable less than that in the United States.

In Canada, a survey of nine major Canadian cities (Table 2) shows that between 1977 and 1981, there has been a relatively constant increase in robbery rates. In 1977, the average robbery rate across the nine cities surveyed was 125.2 per 100,000 population as compared to 158.9 in 1981, an increase of 21%.

In Canada, the use of firearms during robberies has decreased by 4.1%[3] in 1981 over 1977, but the use of "other offensive" weapons has increased 3.6% over the same time period (see Figure 3). It seems, therefore, that the use of some violent deadly weapon has remained relatively stable, but there has been a shift toward the use of other forms of the offensive weapons. The implications of this observation are not clear because of the limited

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3 While there was a percentage decrease in the use of firearms during robberies, numerically speaking there was an increase from 7,507 in 1977 to 9,040 in 1981. This figure was reported in a recent document published by the Canadian Centre for Justice Statistics, entitled Robbery. (August, 1982).

information in the data. The trend may be related to the type of robberies, age of robbers, ease of engaging in a robbery, penalty if caught, deterrent (general and specific) factor, the Gun Control legislation several years ago, or some other explanation or permutation of the above points.

Perhaps a more disturbing observation is that Canada's robbery rate has steadily increased since 1977 while the clearance rate has dropped from 33.1% in 1977 to 30.0% in 1981, a difference of 3.1% (see Figure 3). The decrease in clearance rates in Canada is virtually identical to that of the U.S.--3% over the 4 years.

A review of Table 3, which compares Canadian and U.S. robbery rates, clearance rates, average loss per incident, and total annual loss, shows that while Canada has lower rates across all catagories, both countries show an increase in robbery rates and decrease in clearance rates. And while financial loss figures are not available for Canada, the monetary loss figures for the U.S. depict the gravity of the offences to persons and to the economy in general and since Canada's robbery rate is increasing we can assume that its costs are also steadily increasing. Table 3 also suggests that this escalating trend may prove costly to the Criminal Justice System as a whole (for example, see Cook, 1983). The obvious conclusion that can be drawn from these observations is that robbery is a serious problem, both economically and personally, in our society today.

Robbery Trends in British Columbia

Table 4 shows that in British Columbia, where the study was undertaken, trends in the robbery rate are similar to those throughout the rest of Canada. Since 1977, B.C.'s robbery rate has increased from 83.8 to 114.4 per 100,000 inhabitants in 1981. At the same time, the province's clearance rate

for robberies dropped from 35.1% in 1977 to 26.5% in 1981.[4] This suggests that not only have the incidents of robbery increased, but that the chances of apprehension appear to be getting slimmer given the decrease in clearance rates, thereby increasing the potential of robbery becoming a prime opportunistic form of criminal activity. This latter concept will be discussed in more detail in the next section.

By examining the figures in Table 5, it can be seen that in Canada and British Columbia, in terms of degree of involvement, adult males are most often charged for robberies followed by juveniles, and female adults. Male adults charged for robberies in B.C. comprise about 11% of the total charges for robberies by male adults in Canada, and juveniles in B.C. account for a little more than 8% of all charges for robberies by juveniles in Canada. The figures apply only to offenders who have been charged. These figures are important because if we examine the relative proportion of adults and juveniles in the general population, one can determine the extent to which each sector of the population is responsible for robbery offences. If the total juvenile population is relatively low in B.C., for example, then their rate of involvement in robberies is an important consideration. It can have an important bearing when considering who to interview or the type of recommendations one might consider making when addressing change factors.

The pattern of charges for robbery in Vancouver is very similar to the pattern in Canada as a whole.

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4 It should be noted that official crime rates are normally calculated against base populations of 100,000, but offence specification rates such as robbery, are based on the actual city or urban base population. According to Boggs (1966), this method is more informative and representative of the actual crime occurrence.

Robbery Trends in Vancouver

As can be seen in Table 6, there has been a relatively steady increase in Vancouver's robbery rate in recent years. Between 1977 and 1983, the clearance rate for robberies in Vancouver has dropped from 29.5% to 23.4%, despite new crime prevention endeavours and an increase in the police force.

In Table 7, the figures show that since 1977 the number of adults charged with the offence of robbery has increased, but not in a consistent manner. For juveniles, on the other hand, the number of youths charged has dropped from 16% to all those charged in 1977 to 5% of all those charged with the offense of robbery in 1983.[5] Such figures might lead one to argue that the overall incidence of robbery has not really changed much since 1977. But when the figures in Table 6 are reviewed, it appears that robbery, in Vancouver, has increased in frequency while the clearance and charge rates have decreased. Compared with the figures in Table 4, the trend seems to be representative of Canada as a whole. These observations simply serve to reinforce the impression that robbery is indeed a growing problem in society and that there is an increasing probability that individuals and (small) businesses will be victimized.

Reviewing the types of robberies committed over the last four years (1981-1984) in Vancouver, it can be seen, in Table 8, that robberies of financial institutions and convenience stores far outnumber other types of commercial robberies. From 1981 to 1984, the monthly average number of robberies taking place at convenience stores has increased by about 40% while the other types of services identified did not experience such dramatic increases, with the exception of financial institutions.

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5 This may, in part, have been due to the active use of diversion during this period

Summary

The extent of robbery seems to be a serious issue whether examined at a national or a local level. If the extent of robbery is recognized as the social cohesion "barometer" (Conklin, 1972), then, given the present state of affairs, it is more important than ever to deal with this problem. This is especially true for financial institutions and convenience stores where there appears to be a greater risk of financial loss and victimization than for other types of business establishments.

Table 1

Number of Robberies in certain U.S. Cities (over 100,000 in pop.: 1977 - 1981

Location		1977*	1978*	1979*	1980*	1981**
Anchorage,	(1)	9863	10243	11848	11724	13731
Alaska	(2)	226	218	343	296	380
	(3)	2.3	2.1	2.8	2.5	2.7
	(4)	--	--	193.3	170.1	212.1
	(5)	--	--	177478	173992	179148
Chicago,	(1)	393162	390224	186728	196605	173316
Illinois	(2)	20016	19280	14464	16261	16118
	(3)	5.1	4.9	7.7	8.3	9.3
	(4)	289.4	274.5	472.5	544.5	535.0
	(5)	6916044	7023831	3060801	2986419	3012703
Detroit,	(1)	294466	277945	110725	127420	147970
Michigan	(2)	20047	16251	11413	13429	23246
	(3)	14.7	17.1	10.3	10.5	15.7
	(4)	454.3	368.7	906.5	1121.6	1947.2
	(5)	4412300	4407179	1258924	1197325	1193805

Table 1 (cont)

Los Angeles, Cal.	(1)499813	521797	258635	293837	304100
	(2) 30576	33201	20454	25673	28152
	(3) 6.1	6.3	7.9	8.7	9.2
	(4) 429.4	467.1	714.3	869.5	929.0
	(5)7126848	7107342	2863412	2952511	3031090
Montgomery, Albany	(1) 14846	13973	14001	163351	11512
	(2) 339	329	242	306	263
	(3) 2.3	2.3	2.2	2.4	2.3
	(4) 129.7	127.5	151.6	173.0	146.6
	(5)261463	258100	159644	176860	179357
New York, N.Y.	(1)709234	659414	621110	710151	725846
	(2) 77208	76172	82572	100550	107475
	(3) 10.9	11.5	13.3	14.2	14.8
	(4) 810.2	819.0	1161.4	1429.2	1520.0
	(5)9529314	9300743	7109420	7035348	7070429
Seattle/ Everett, Wash.	(1) 91399	101653	46339	53294	55764
	(2) 2359	2918	2071	2253	2244
	(3) 2.6	2.9	4.5	4.2	4.2
	(4) 164.9	197.3	397.8	458.0	465.3
	(5)1430858	1479053	521590**	491897	503696

Table 1 (cont)

Source: The data are based on the Annual Uniform Crime Reports' 1977 - 1981), U.S. Department of Justice, Washington, D.C.

Key: (1) Total crime index, represents those actually reported to police.
(2) Total robbery count, represents those actually reported to police.
(3) Proportion of robberies.
(4) Rate of robberies per 100,000 inhabitants.
(5) Total metropolitan population.

*Population estimates not based on SMSA's (Standard Metropolitan Statistical Areas) figures but on city estimated.

**Population estimates switched to SMSA's which represents urban areas "composed of clusters of counties containing a core city and its commuting suburbs, which together have a combined population of at least 50,000". (Brantingham & Brantingham, 1984:281).

Table 2

Number of Robberies in certain Canadian Cities (over 100,000 in pop.: 1977 - 1981

Location		1977*	1978*	1979*	1980*	1981*
Calgary,	(1)	39649	33946	41775	48848	53943
Alberta	(2)	420	360	453	528	608
	(3)	1.1	1.1	1.1	1.1	1.1
	(4)	85.7	70.7	85.3	94.3	102.3
	(5)	489.9	509.3	530.9	559.7	592.6
Edmonton,	(1)	56718	55984	59231	65534	70622
Alberta	(2)	1021	826	799	986	1176
	(3)	1.8	1.5	1.3	1.5	1.6
	(4)	177.8	139.4	131.3	156.6	179.0
	(5)	574.0	592.7	608.2	629.8	656.9
Halifax,	(1)	18093	18820	18749	17574	20505
Nova Scotia	(2)	222	297	232	291	324
	(3)	1.2	1.6	1.2	1.7	1.6
	(4)	81.9	108.7	84.6	112.3	116.7
	(5)	270.8	273.1	274.1	275.9	277.7

Table 2 (cont)

Montreal,	(1)133715	127892	151446	170215	179832
Quebec	(2) 6211	6065	7066	8400	8754
	(3) 4.6	4.7	4.6	4.9	4.9
	(4) 220.7	216.6	252.3	299.1	309.5
	(5)2813.7	2799.2	2799.8	2808.4	2828.3
Ottawa,	(1) 49808	52096	55857	62627	67408
Ontario	(2) 863	844	944	1132	1260
	(3) 1.7	1.6	1.7	1.8	1.9
	(4) 123.1	119.0	132.5	158.5	175.5
	(5) 701.1	709.0	712.6	714.3	718.0
Quebec,	(1) 30963	29774	36734	40576	41475
Quebec	(2) 835	869	941	1004	888
	(3) 2.7	2.9	2.6	2.4	2.1
	(4) 152.1	156.4	167.3	176.2	154.1
	(5) 548.9	555.6	562.4	569.6	576.0
Toronto,	(1)157409	165242	166576	185423	187263
Ontario	(2) 1723	1783	1709	2076	2041
	(3) 1.1	1.1	1.0	1.1	1.1
	(4) 60.3	61.9	58.7	70.2	68.0
	(5)2842.0	2877.6	2910.0	2955.4	2998.7

Table 2 (cont)

Vancouver,	(1) 96553	99613	99933	109342	115552
B.C.	(2) 1502	1769	1539	1924	2118
	(3) 1.6	1.8	1.3	1.7	1.8
	(4) 127.9	148.8	127.4	154.7	167.0
	(5)1174.0	1188.9	1207.6	1243.9	1268.1
Winnipeg,	(1) 48215	48656	51180	60052	65559
Manitoba	(2) 566	544	643	745	924
	(3) 1.2	1.1	1.3	1.2	1.4
	(4) 97.3	92.9	110.3	127.8	158.0
	(5) 581.9	585.0	583.0	582.7	584.8

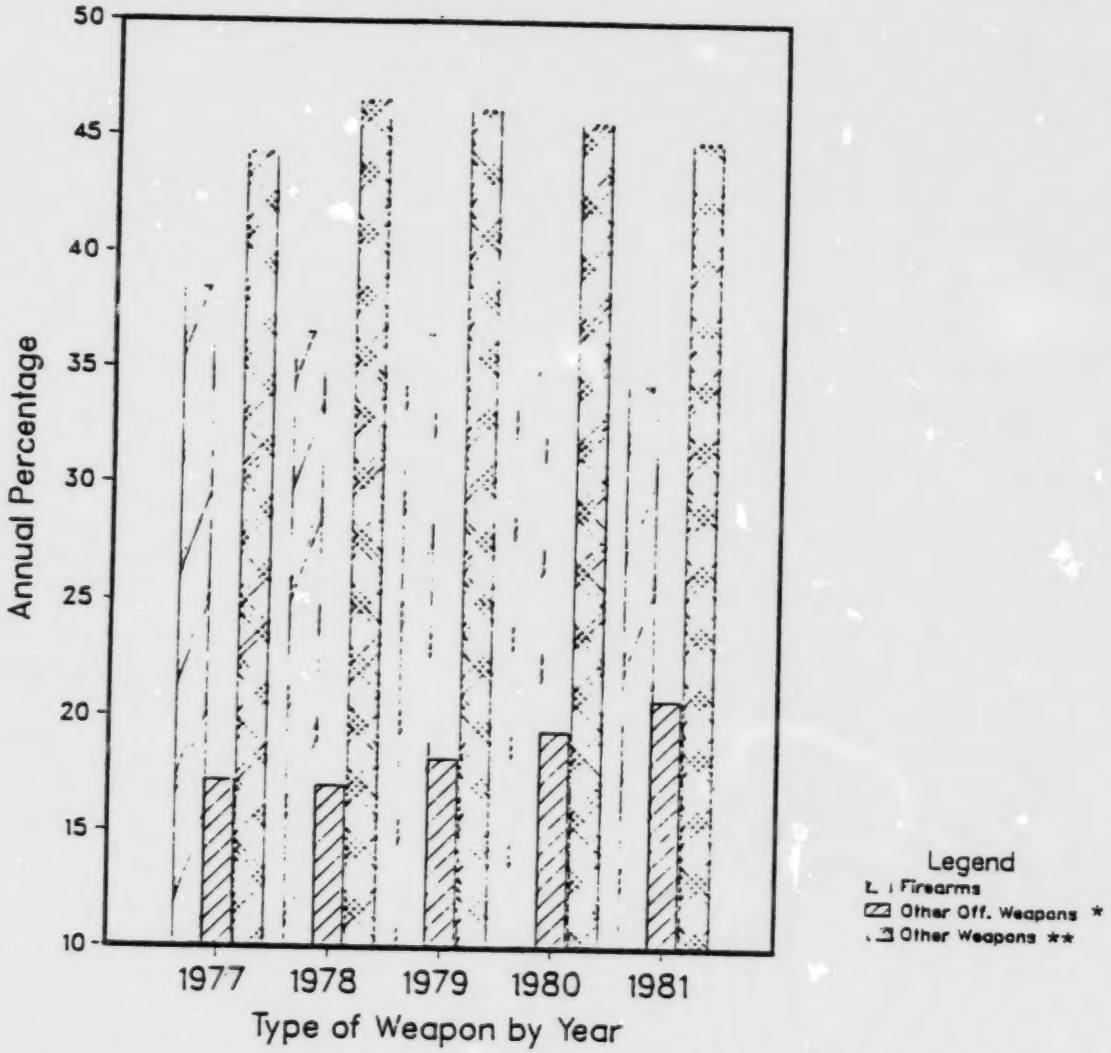
Source: Statistics Canada, Catalogue #91-207.
Statistics Canada, Crime and Traffic Enforcement Statistics, Annual Catalogue #85-205.

*Population estimates based on 76-79 Census Tract information.

Key:
(1) Total criminal code index.
(2) Total robberies known to police.
(3) Proportion of robberies.
(4) Robbery rate per 100,000 population.
(5) Total population of city.

Note: Census Tract data obtained from Statistics Canada (Cat. No. 91-207, May, 1984) indicate that population of Canada has changed dramatically from 1976 through 1981. There has been an average increase of about 0.8% per year. In 1976 the population was estimated at 23,110,000 and in 1981 at 27,485,000.

Figure 3
Percentage Distribution of Robberies known to Police
by Type of Weapon Used
Canada: 1977–1981

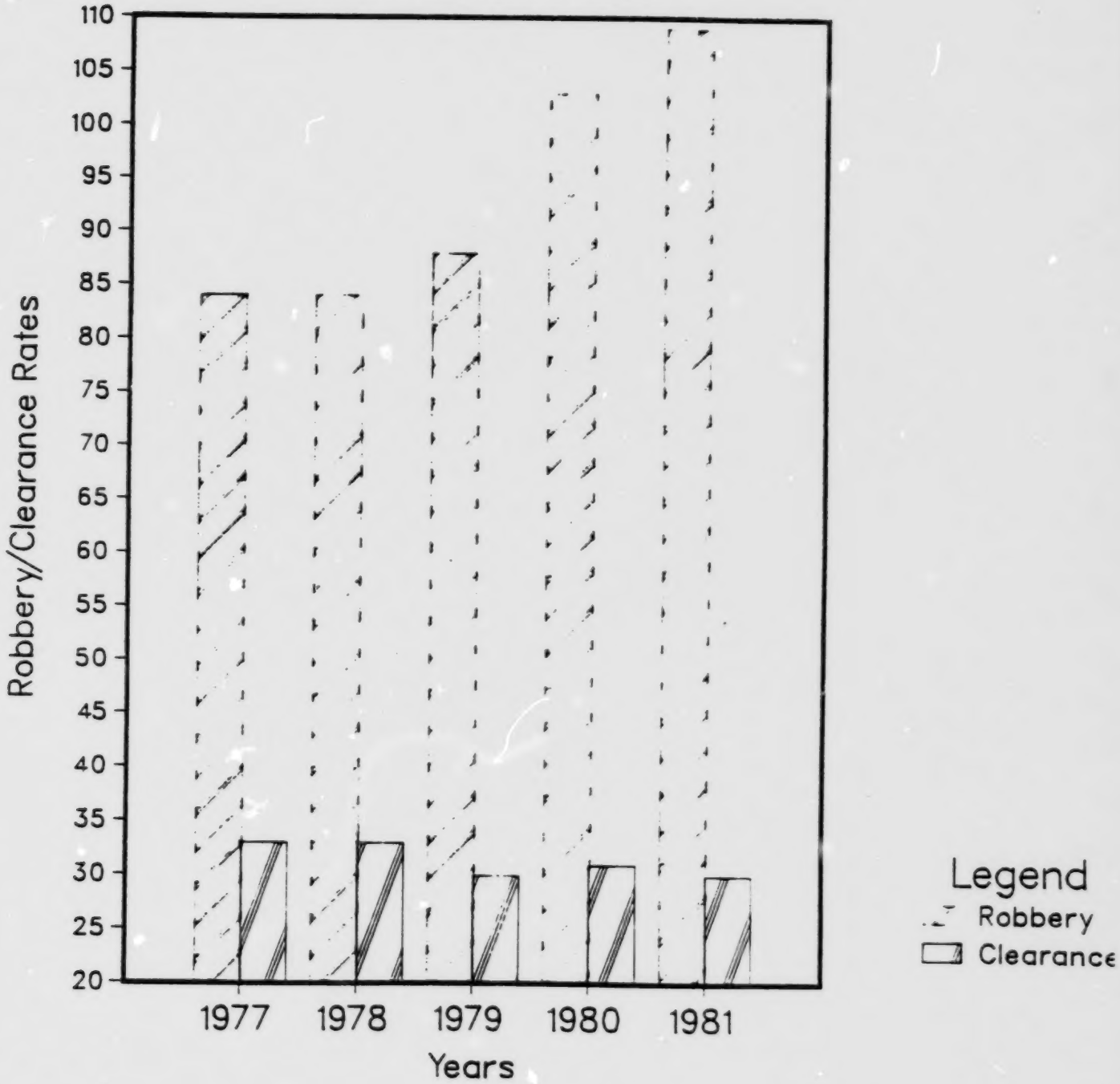


Source: Vancouver City Criminal Justice Monthly Reports

* other offensive weapons include knives and bats

** other weapons include things such as hammers, broken bottles, billy clubs, etc.

Figure 4
Annual Figures for Robberies
Robbery Rates and Clearance Rates
Canada: 1977–1981



Source: Vancouver City Criminal Justice Monthly Reports (1977-1981).

Table 3

Annual Figures for Robbery Rates, Clearance Rate, Average Loss, and Total Loss for Canada and U.S.A.: 1977-1981

Canada/U.S. YEAR	Rate per 100,000 population	Clearance Rate	Average Loss	Total Loss
1977	83.6:187.1	33.1:27.0	N/A:$377	N/A:153M[1]
1978	83.7:191.3	32.7:26.0	N/A:$434	N/A:181M
1979	88.3:212.1	30.3:26.0	N/A:$532	N/A:248M
1980	102.8:243.5	31.1:24.0	N/A:$607	N/A:333M
1981	108.6:250.6	30.0:24.0	N/A:$665	N/A:382M

Source: Statistics Canada, Crime and Traffic Enforcement Statistics, Annual Catalogue #85-205.
: UCR, U.S. Department of Justice 1977-1981.

[1] M = million dollars.

Table 4

Annual Figures for Robberies,
Robbery Rates and Clearance Rates
for British Columbia*: 1976-1981

Year	Actual # of Robberies[1]	Robbery Rates	Percent Unfounded[2]	Offences Cleared by: Charge	Other[3]	Total
1976	2328	93.5	7.2	28.5	6.3	34.8
1977	2093	83.8	8.0	29.3	5.8	35.1
1978	2387	94.3	7.8	30.2	5.8	36.0
1979	2198	85.6	7.5	23.0	6.3	29.3
1980	2649	100.3	5.8	26.6	4.2	30.8
1981	3102	114.4	5.3	22.5	4.0	26.5
AVERAGE		95.7	5.5	26.3	5.2	32.1

* B.C. crimes represented 11.7% of all offences in Canada during 1981. B.C. represented 10.9% of total population based on 1979 estimates.

1 'Actual number of robberies' represents the actual number of such offences reported to police.

2 'Percentage unfounded' represents those cases in which investigation established that the offence did not happen or was not attempted.

3 'Offences cleared otherwise' (other) include conditions when: 1) the offender has been committed to a mental hospital and it is unlikely that he will be released; 2) the offender confesses to the offence and then subsequently dies; 3) receives diplomatic immunity, and 4) the offender is know and sufficient evidence has been obtained but the complainant refuses to prosecute.

Source: B.C. Police Commission Annual Report, 1976-1981.

Table 5

Number of Robberies Resulting in Charges Against Adults and Juveniles in Canada and for British Columbia: 1977-1981

CANADA	Persons Charged for Robbery Adult Male	Adult Female	Juveniles Charged for Robbery (Male & Female)
Year			
1981	6748	524	1826
1980	6837	538	2641
1979	5524	429	2170
1978	5800	422	1280
1977	5664	401	1741
BRITISH COLUMBIA			
1981	767 (11.4)*	83 (15.8)*	176 (9.3)*
1980	741 (10.8)	87 (16.1)	158 (6.0)
1979	553 (10.0)	57 (13.3)	156 (7.2)
1978	728 (12.5)	70 (16.6)	150 (11.7)
1977	567 (10.0)	85 (21.2)	147 (8.4)
Average	10.9	16.6	8.5

Source: Statistics Canada, Crime and Traffic Enforcement Statistics, Annual Catalogue #85-205.

* Represents the percent of total persons charged in British Columbia compared to the total adults (male & female) and juveniles charged in Canada. This does not account for whether they were residents of the province at the time, nor how many B.C. residents committed robberies elsewhere in Canada.

Table 6

Robbery Frequency and Clearance Rates in Vancouver: 1977-1983

Year	No. of Robberies	Robbery Rate[4]	Offences Cleared by Charge	Otherwise	Total(%)	Total Crime Rate[5]
1977[1]	1222	2.97	24.1	5.4	29.5	122.4
1978[1]	1468	3.57	27.3	2.2	29.5	127.7
1979[2]	1276	3.21	19.0	2.1	21.1	130.3
1980[2]	1578	3.98	23.2	1.5	24.7	139.6
1981[3]	1722	4.15	18.9	1.7	20.6	148.8
1982[3]	2433	5.87	17.2	1.6	18.7	167.9
1983	1708	4.81	20.4	3.0	23.4	N/A

Source: B.C. Police Commission Annual Report, 1977-1981/82.

1 1977-1978 figures based on 410,188 population; 1976 Census Tract.
2 1979-1980 figures based on 396,800 population; 1979 update of Census Tract.
3 1981-1983 figures based on B.C. Population Research Report; 414,281.
4 'Rate' - based on 100,000 population.
5 'Crime Rate' - means number of Criminal Code offences based on 100,000 population.

Table 7

Number of Reported Robberies by Adults and Juveniles in Vancouver: 1977-1983

Year	Adults		Juveniles	
	No. of Robberies	% of Total Reported Robberies	No. of Robberies	% of Total Reported Robberies
1977	267	84	49	16
1978	356	90	38	10
1979	276	93	22	07
1980	358	93	27	07
1981	376	94	25	06
1982	405	90	42	10
1983	365	95	19	05

Source: B.C. Police Commission Annual Report, 1977 - 1983.

Table 8

Distribution of Reported Robberies in Vancouver
by Type of Business: 1981-1984

Type of Business	1981[1] Av. Number	Per Mth/N[1]	1982 Av. Number	Per Mth/N	1983 Av. Number	Per Mth/N	1984 Av. Number	Per Mth/N[4]
Financial instit.[5]	6.6	53	13.0	156	19.1	229	20.4	102
Convenience stores	5.3	42	11.2	134	6.6	84	7.4	37
Grocery stores	1.1	9	1.3	15	1.6	20	0.8	4
Pizza delivery/stores	0.4	3	3.3	39	1.1	13	0.2	1
Gas stations	4.0	32	3.4	41	1.4	17	0.6	3
Drug stores	2.5	20	3.0	36	2.6	31	3.6	18
Hotels/Motels	1.4	11	2.6	31	3.3	39	0.8	4
Restaurants	0.6	5	1.8	21	1.1	13	0.8	4
Taxi drivers	1.8	14	1.5	18	0.8	8	1.0	5
Fast food outlets	0.9	7	1.2	13	0.8	8	0.6	3
Jewelry stores	2.1	17	1.4	17	0.5	6	0.0	0
Liquor stores	0.0	0	0.3	3	0.3	4	0.0	0
Other[2]	4.5	36	5.6	67	5.2	63	3.0	15
Personal[3]	---	---	---	---	4.1	49	3.4	17
TOTAL	31.1	249	49.3	591	48.3	580	42.6	213

Source: Daily Police Investigation Reports.

1 Data from May 1, 1981 - December 31, 1981.

2 In this category "other" robberies included furniture stores, clothing stores, hair salons, and other businesses which do not appear in the list.

3 "Personal" robberies were included in the "Other" category in 1981 and 1982.

4 Data for the first five months, January 1 - May 30, 1984.

5 Financial institutions include banks, credit unions, trust companies and any other forms of legitimate money lending and investment institutions.

Note: No attempt was made to identify which businesses were robbed more than once in a year. Later we do present this breakdown for convenience stores. It is obvious, however, that some businesses will have been victimized more than once.

II. LITERATURE OVERVIEW

Crime prevention has become a popular means by which citizens work with their police force to address the growing problem of crime. Prevention is aimed at reducing the frequency of an event or behavior considered undesirable. Brantingham and Faust (1976) have identified three major forms of crime prevention: 1) Primary prevention - by identifying and then changing those social environmental conditions which are physical and are considered to provide potential opportunities for crime to occur. This approach attempts to prevent crime before it occurs. Some examples include Crime Prevention Through Environmental Design (CPTED), police patrols, and social planning. 2) Secondary prevention - through the use of testing and screening, this approach is directed at early identification and intervention in the lives of individuals or groups in criminogenic circumstances. Examples include recreational programs for pre-delinquent youth. Pre-delinquent youth are those who are found, or at risk of becoming delinquent, as determined from testing their demonstrated behavior and/or their pre-disposing, socio-economic background. 3) Tertiary prevention - directed at prevention of recidivism. This approach usually consists of efforts to 'treat' offenders. The form 'treatment' takes is usually dependent on the environment in which the 'treatment' is to take place. It can be in the form of incapacitation, rehabilitation through training or surveillance, or reform through community treatment.

One of the more popular forms of primary prevention has been CPTED.[6] Such an approach has been incorporated into the Robbery Information Program in Vancouver. There are very few studies, however, which have addressed the use

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6 For a general review of CPTED principles and findings: see Jeffrey, 1976; Newman, 1972; or Brantingham & Brantingham, 1984.

of "mechanical" (Lejins, 1967) or "primary" (Brantingham & Faust, 1976) prevention techniques as they relate to convenience store robberies. Numerous works are available on robbery and robbers per se (see Conklin, 1972; Einstadter, 1969; Feeney & Weir, 1973; Letkemann, 1973; McClintock and Gibson, 1961; Normandeau, 1968). These works, however, are for the most part descriptive efforts which discuss the career patterns and personal characteristics of robbers and do not suggest any method(s) of preventing robberies. To date, only one study has been located which directly attempts to examine the effect of the physical environment on the robbery of convenience stores.[7]

Dennis Duffala (1976:228) attempted "to test whether or not the vulnerability of a convenience store to armed robbery is associated with certain environmental characteristics." Four areas were examined: the location of a store in relation to major transportation routes, the amount of vehicular traffic in the area, surrounding land use area, and the number of surrounding commercial activities. The areas were derived from findings of previous crime pattern studies which used environmental characteristics to explain the activity. Duffala found no relationship between the proximity of stores to major transportation routes and the number of robbery incidents reported. Analysis of land use and robbery incidents also revealed no significant relationship to reported robberies nor did the hypothesis about store location and number of surrounding commercial activities. The vehicular traffic plan, however, was significantly related to robbery levels. Duffala observed the stores on a street with a light flow of traffic (less than

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7 Later in this section, several Canadian studies will be reviewed which <u>indirectly</u> looked at precipitating factors for convenience store robberies.

10,000 vehicles in 24 hours) had been robbed three or more times. Slightly over ninety percent of the robbed stores were located on such streets.

When the four hypotheses were examined together, the results were "highly significant" in terms of explaining why twelve of the 39 convenience stores were robbed three times or more (p. 244-245). Based on these observations, Duffala suggested that environmental factors should be considered when implementing crime prevention programs.

In Canada, there have been a number of robbery studies which have included the examination of convenience store robberies along with those of other commercial business and personal robberies. Ciale and Leroux (1983) conducted a survey of armed robberies in Ottawa. One of their objectives was to develop a "framework for understanding such incidents and suggest ways and means of preventing them"(robberies). They identified five key factors: 1) the potential gain offered by the robbery; 2) an access route to the target and the money; 3) vulnerability of the victim; 4) an escape route; and 5) weapons used to control the victim(s).

The study based its analysis on 495 officially reported police cases over a twelve month period. With regard to the convenience stores they observed:

1) Small business merchants (chain and independent convenience stores) were the most 'popular' type of robbery target.
2) Convenience stores were considered a high risk because of their long hours of operation, a minimum of employees being present, and the strong probability of some money being available.
3) Escape methods to and from convenience stores were considered easy either by vehicle or on foot. Given the general location of most convenience stores, it was felt that the access and escape routes provided robbers with 'easy' options.

4) Most robberies were committed by 'lone bandits' - approximately 56%.

5) In approximately 80% of the cases, less than $200 was stolen.[8]

6) Seasonal or weekly patterns were very pronounced and over 65% of the reported robbery incidents took place between 7:00 p.m. and 1:00 a.m.

As Ciale and Leroux note, their results are similar to those of Duffala (1976) and those of the Consortium (1983). Due to the nature of the study, however, the information about the convenience stores is descriptive and very general. For example, they do not distinquish robbery incidents of convenience stores by hours of operation or neighbourhood characteristics nor do they discuss whether certain stores were robbed more than once and if so, possible reasons why. No mention is made about the fact that certain chain stores (e.g., 7-11 and Mac's) have robbery prevention programs which may have had some effect on the distribution of the convenience store robberies. They indirectly suggest that part of the problem with clearance rates may be due to fact that "many robbers...succeed in surprising and shocking their victims. The result is that most victims after the incident cannot seem to recall details about the physical appearance of the armed robbers" (p.32-33). While this might be a possibility in some cases, the interpretation appears to be based on a subjective assumption. Research on eyewitness evidence suggests that in general people have more difficulty with recall than with recognition (see Loftus, 1979; Yarmey, 1979 for a general review of the literature).[9]

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8 Unfortunately, Ciale and Leroux did not calculate the average loss per store. By itself, the figure is not very informative. It does not differentiate between a store robbed once and those robbed several times.

9 There has been some research indicating that eyewitness training may enhance recall ability (see for example, Baddeley and Woodhead, 1983).

With regard to means of preventing robberies, very limited attention is given to the specific environmental and physical layout of the stores. As noted elsewhere, Southland Corporation has shown that store modifications can assist in reducing the potential for robberies.

In summary, the report compiled by Ciale and Leroux provides some interesting general descriptive information about armed robberies in one city of Canada. Unfortunately, their findings lack the depth necessary to develop specific policy considerations for reducing robbery incidents among any of their business classifications, let alone, for the purposes of this project, among convenience stores.

In another recent Canadian study, exploring the availability and quality of data on robbery in Canada, Billingsley et al. (1983) include a section on convenience stores. In their survey of five types of businesses, they found "the greatest variation in data collections, data uses and attitudes toward robbery prevention among convenience store operators" (p.104). They contacted five different convenience store chains (as opposed to independently owned convenience stores) and found a dramatic contrast among the chains in their interest/use of such data, as well as a range in interest in crime prevention programs. Some had very extensive programs while others had little or none at all.

Based on the convenience store chains varying range of awareness and interest in crime prevention, Billingsley et al. (1983) suggest that some formal organization should be created "to familiarize each other (the stores) with common crime problems, promote novel prevention methods or establish liaisons with local police forces." This, they suggest, could be sponsored by the Ministry of the Solicitor General, in the form of:

a) "publicizing data about convenience store robberies;

b) publicizing prevention methods and police handling of convenience store robberies through the form of small, readable booklets; and,

c) hosting regional or local forums of convenience store operators and franchisors, for the purpose of introducing security managers to each other and educating operators in the large number of prevention methods available to them" (p. 107-108).

While these suggestions are worthy of consideration, there is some question as to whether educational pamphlets would be very effective. Mass media efforts, in the past, have had questionable impact on the public (see Sacco, 1982). Similarly, victimization research indicates that while people may be aware of the extent of crime, they often feel that they are somewhat immune. Consequently, they do not feel the need to participate in informative programs.

Having forums for convenience store operators might prove useful, but many of the stores are privately owned and operated, and have long hours, making it difficult for them to attend meetings. For independently owned stores, forced attendance is not possible as it might be with chain stores.

The above points, although critical, have been made in order to draw attention to the limited knowledge that we have about why convenience stores are robbed, what can be done to reduce their risk of being robbed, and to what extent existing efforts have been of any use. These are some of the issues which this report attempts to address.

In another major study concerned with armed robbery in Quebec, Normandeau (1981:306)[10] notes that in recent years, there has "been a spectacular

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10 The article is based on the Quebec Task Force report which was commissioned by the province to study the problem of robbery and what action could be taken to reduce the frequency of robberies.

increase in armed robberies among small merchants...". Normandeau's observations were, in-part, based on one hundred interviews with robbery victims, of which two-thirds were "small businesses".[11] Some of Normandeau's interview results concur with those of Ciale and Leroux (1983) in noting that robbers of small businesses are usually done by a single individual. In contrast to Ciale and Leroux, however, the interview data suggest that most victims stay "cool" despite the display of any weapons by the robber. Normandeau comments that "self-defence and resistance are wishful thinking rather than conduct...."(308).

Normandeau's interviewees offer a range of possible causes of armed robbery. Some of the more frequent causes include "poverty, unemployment, laziness and the idleness of the youth." These interpretations, however, offer us little in terms of predicting who will become a robber (see, for example, Cook, 1983). For example, how important is each factor and to what degree do they interact to cause an individual to turn to armed robbery?

The respondents suggest a number of security measures which they feel may be of use to small businesses in reducing their risk of injury and extent of loss. Some of the suggestions include buying insurance, making frequent deposits at the bank, hiding money, and using an alarm system. While these suggestions appear practical, there may be problems in implementation. With only one person usually in the store, frequent deposit trips may not be practical. The purchase of a safe might be too expensive especially given the fact that some stores are never robbed. Hiding money may be too risky. This practice would have to be kept confidential--something which is not always

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[11] The types of businesses included in this category are convenience stores, service stations, jewelry and others.

possible, especially if the store must hire staff. Although alarm systems might help the victim feel more secure, discussions with members of the Vancouver City Police CPU point out that 'false alarms' are very costly and time consuming to the police. Too many false alarms from a store might lead to a reluctance on the part of the police to respond quickly. A better alternative might be simply to call the police immediately after the robber leaves.

As with Ciale and Leroux's report, Normandeau's descriptive observations are interesting and they clearly illustrate the magnitude of the convenience store robbery problem. The suggested solutions, however, while based loosely on management and environmental issues, are not empirically supported. Before any dramatic steps are taken to try to reduce the potential risk of robbery among convenience stores, a more comprehensive study is necessary. The focus of the present study, funded by the Ministry of the Solicitor General, represents such an attempt.

Other Research

While not directly related, similar concern and support for environmental characteristics as they relate to criminal behavior and mobility have been expressed by other writers, including Pyle (1976) and on spatial and temporal aspects; Capone and Nichols Jr. (1976) on urban structure and criminal (robbery) mobility; Molumby (1976) on physical environmental factors as they relate to crime rates in a university housing project; Brown and Altman (1981) on territoriality and residential crime; and Brantingham and Brantingham (1981-82) on burglary patterns as they relate to physical landmarks.

Summary

Given the current atmosphere of fiscal restraint and fixed budgets, the community needs to become more directly involved in, and responsible for, its

own well-being rather than relying solely upon an overworked and often understaffed police force. Crime prevention programs, therefore, appear to offer a pragmatic alternative to dealing with commercial robberies.

With the limited success of most traditional attempts to deal with crime or criminal behaviour (see Martinson, 1976), there has been a growing interest in applying CPTED principles which are subsumed under the primary prevention model. One of the goals of the CPTED approach is to design or redesign the physical environment to aid in reducing crime and it has been proven to be effective in a number of areas.

One program that is based on a modified environmental crime prevention model is the Robbery Prevention Program for convenience stores in Vancouver, British Columbia. In the following section, the RIP, its kit, and its implementation in Vancouver will be discussed.

III. ROBBERY INFORMATION PROGRAM

While it is recognized that some official statistics are less reliable than others (e.g., Herbert, 1982, Nettler, 1978), robbery counts appear to be more accurate as they represent a crime type which involves both property and personal violations. When robberies concern commercial businesses, it is even more common to have such incidents reported reliably. Therefore, any robbery prevention program directed at commercial businesses will perhaps be easier to evaluate than other programs which rely on official statistics for analyses.

While no crime prevention program can eradicate all crime, such programs do have the potential to reduce the incident rate to a level where the measures and energy invested make it an effective effort both economically and operationally.

The Vancouver Robbery Information Program (RIP), which is based on the Southland Corporation RIP, is the subject of evaluation in this study. Before discussing the Vancouver program, however, it is appropriate to review Southland's program.

Southland Corporation's RIP[12]

In 1976, Southland Corporation, the owners of the 7-Eleven convenience chain stores, realized that their U.S. stores were losing a great deal of money to armed robberies.[13] In looking at the situation, they identified a

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12 Much of the information which describes Southland Corporation's RIP was obtained through discussions with Mr. Gerry Bull (Feb., 1982) who was extremely helpful and cooperative. Additional information was obtained in discussion with Ray Johnson, Southlands crime prevention consultant, and a former armed robber, at the Western States Crime Prevention Conference in Spokane, Washington; April 6, 1984.

13 This general trend or impression is also reflected in the Annual Uniform Crime Report Statistics, part of which are summarized in Table 4.

need not only to reduce the incidence of 7-Eleven armed robberies, but also to prevent the danger and reduce the incidence of violence.

In an attempt to deal with the robbery problem, Southland surveyed the police and various sectors of the business community in an effort to identify what was being done elsewhere, and what could be done to reduce the robbery incidents and victimization. When they began their investigation, they discovered that nothing concrete had been established which might help them set up guidelines for a robbery prevention program. General suggestions that were offered at the time, included:

- Keep the store clean.
- Employees should look and act alert.
- Keep the store amply lighted inside and out.
- Employees should know how to contact the police.
- Employees should preserve any possible evidence in case of a robbery.

Not being satisfied with these suggestions, Southland decided to approach the problem from a different angle. Their efforts were aimed at the source of the problem--convenience store robbers. Through the efforts of Dr. Bob Crow of the Western Behaviour Sciences Institute in LaJolla California, a survey of robbers in his rehabilitative program was undertaken. From this group, Mr. Ray Johnson, who had been sentenced to 25 years for robbery and had the distinction of being the first person ever to break out of Folsom prison, was identified for his experience. Realizing his talents and knowledge in the area of robbery, Johnson became the chief crime prevention consultant for Southland. Johnson identified a seven step program. The steps were designed to reduce the incidence of 7-Eleven store robberies. The seven steps, which have also been adopted by the Ministry of the Solicitor General of Canada, include (see Appendix B for more detail):

1. Look Safe: give the store a look that says "we are vigilant".
2. Monitor Danger: keep a sharp lookout at all times.
3. Spotlight Crime: put the robber on stage.
4. Be in Charge: greet each person who comes into the store.
5. Reduce Cash: keep as little money in the cash register as possible, especially bills and let the world know it.
6. The Second Store Look: late at night, take special steps to make the store unattractive to would-be robbers (e.g., take posters down from any windows; turn on outside lights if possible; reduce the amount of cash in the register).
7. Be Honest: don't lie to robbers.

These steps were incorporated into a booklet on crime prevention. Some extensive research was then carried out in the U.S. using 120 7-Eleven stores which had similar robbery frequencies and business characteristics. Sixty stores were introduced to the prevention package and sixty were not. After six months, the experimental group had a 30% reduction in robberies and a 50% reduction in violent incidents. The control group indicated no significant changes over the same period of time.

After the apparent success of the prevention package, it was adopted for use in all the 7-Eleven stores across the United States, which in 1976 amounted to approximately 4,000 stores. Although Canada had 7-Eleven stores at the time, the prevention kit was not formally adopted in Canada for a number of years. This delay was partially attributed to the fact that Southland did not have a branch office to oversee the program's introduction. There was a 20-25% increase in robberies of the Canadian 7-Eleven stores in 1979 over 1978 when the program finally did become available.

It is possible that this increase was due to changes in reporting practices. It is also unknown whether the increases would have been greater had it not been for the introduction of the program. Unfortunately, no data are available to address these issues.

Since 1979, however, Southland Corporation has experienced a steady decline in the number of robberies as well as in the average loss per victimization incident in their stores. For example, the average loss per robbery was about $128.00 in 1979, while in 1983, it had dropped to around $43.00 per incident. This decline naturally reflected a considerable saving to the Corporation and increased the safety of its employees.

Also, in 1979, it was realized that with the growing number of stores (9,000 internationally; 7000 in North America alone), a more formalized process of introducing the prevention package was needed. It was also decided that a data base for robberies would be useful for assisting in the identification of future needs and for providing more sophisticated information about the type of crime being committed against the stores in general, whether they were robberies or vandalisms.

What evolved from those efforts of 1979 was quite impressive. A new Robbery Prevention Kit (RPK) was introduced. A standardized staff training program was implemented which included training for store operation, plus films on robbery prevention, violence and rape. Employees of 7-Eleven stores were also required to attend these workshops every four to six months. The reason for the relatively high number of workshops is due to the steady turnover of staff which is typical of most retail stores. Regular attendance also helps to impress upon their staff the need to be safe and to practise the basic philosophy of crime prevention as identified by Southland's crime prevention staff.

Southland's present program is basically unchanged. A few different techniques for crime prevention have been introduced in various locations but the basic program has remained intact. One interesting modification that was attempted upon request of the Calgary police was the use of "hidden" cameras. This occurred in 1980 in an effort to assist police in identifying robbers and improving their apprehension rates. After the first year of using the cameras, interestingly enough, it was found that when comparing Calgary with Winnipeg, which had approximately an equal number of stores and robbery incident rates (18-22 respectively), the apprehension rate was only 24% in Calgary as compared to 68% in Winnipeg. One might attribute this to a number of factors. It was found, for example, that the clerks in Calgary were more interested in getting the individual to face the camera than in identifying the person for recording on the witness sheets (see Appendix C). The difference in apprehension rates, however, related to the fact that police cooperation in responding to calls and efforts to apprehend may have varied significantly between the two cities.[14]

A number of other prevention techniques have been attempted with varying degrees of success (i.e., alarm systems, locating higher price items behind the counter, etc.). One of the most effective additions, however, has been the introduction of the Tidel time release safe.

Research indicates that the average convenience store robbery takes between 1 and 3 minutes. The time-release safe can be programmed so that during a normal robbery, only one tube of coins or role of money can be obtained, usual maximum of $10-$15. Larger bills are put into the drop box.

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14 This impression was also expressed in correspondence from Brenda Billingsley of the 'Research Group' in Toronto who recently completed a survey on robbery prevention efforts across Canada for the Ministry of the Solicitor General, (Billingsley et al., 1982).

The safe, thereby, acts as a potential barrier to stealing any more money than is already in the cash register. Southland has a policy to keep less than $60 in the till during the day and less than $30 during the evening (see Appendix C for a description of the safe).[15]

In summary, it would appear that Southland Corporation has developed some relatively cost-efficient procedures to reduce the incidence of robberies and the amount of monetary and victim loss to their stores. The "pay-offs" are safer stores for their employees and shoppers, and indirectly, cheaper merchandise.

Recently, the Southland Corporation Robbery Program was adopted by the Vancouver Police Department in response to a plea by the Chinese Business Community (CBC). The CBC had expressed a concern about the rising number of robberies and, in particular, an alleged robbery resulting in the death of a Chinese merchant in 1982.

Ironically, later investigation showed that, at least with respect to reported robberies, there had been virtually none in the Chinese Community for sometime. Due to community pressure however, and in the interest of good public relations, the police began consulting with Southland Corporation in an attempt to develop an effective robbery program. What ensued after about seven months was a RIP, based primarily on the Southland Corporation package.

Vancouver Police Department's RIP[16]

The Vancouver police identified four primary objectives for adopting the

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15 A benefit of their cash policy is that their losses have dropped considerably over the years and they actively publicize their policy.

16 Background information on the Vancouver RIP was obtained through conversations with one of the CPU officers, of the Vancouver Police Department. The officer also made available to us copies of an earlier research proposal which included some of the present information.

prevention program and kit. The objectives were:

1. To reduce or possibly eliminate the violence that often occurs during the commission of an offence such as robbery.
2. To make the Chinese business community more aware of the fact that there are certain things that they can do to protect themselves.
3. To prevent further victimization of several members of the community.
4. To provide guidance for potential robbery victims with regard to dealing with difficulties which may arise from the robbery.

In addition to using the RPK, which was also translated into Cantonese for the Chinese community, the project uses a slide-tape presentation as a supplement in their robbery prevention seminars. These seminars are conducted on a regular basis throughout Vancouver, for various retail and commercial outlets.

The seminars are generally conducted in the evening at some central community location such as local hotels or in the stores themselves. All relevant stores in the community are notified by mail (see Appendix E for a sample letter) or in person and invited to attend the seminar. At the seminar, which tends to last approximately 2-3 hours, two of the Community Relations officers with the Vancouver Police Department present a talk on crime, robbery, and the general purpose of the project and the RPK. This is followed by the slide presentation and occasionally, depending on interest and available time, by a film on shoplifting which was produced by the T. Eaton Company. Then the actual robbery kit is displayed and discussed in detail. Firearms which might be used in a robbery are also present for inspection. Then depending on the type of audience a mock 90 second robbery film is presented and the participants are subsequently asked to fill out a description form which is included in the kit. The seminar ends with an open discussion period.

To all those who attend a Crime Prevention Seminar, a certificate along with a RPK is presented as a token of appreciation and to help generate healthy relations between the community and police. A final point that should be made about the robbery program is that no one receives the package unless he/she has attended a robbery prevention seminar. This is to ensure that the full impact of the program is felt and to reduce any negative side effects of simply distributing the kits without adequate information.

Since the introduction of the program, the seminars have spread to many other types of service businesses as well. Part of the explanation forwarded by the Community Relations Unit for this is that they would like to use the RIP as a vehicle for creating better awareness throughout a diverse range of commercial enterprises.

The stores do not have to pay for the RPK (see Appendix F) which cost about $3.50 each to have produced. (This is down from the original cost of $5.80). The Vancouver Police Department picks up the cost for having the packages printed. Part of the Police Departments' cost is supported by the grant from the Ministry of the Solicitor General.[17]

Expansion of RIP

Since the introduction of the robbery information program in Vancouver in 1981, the package has been circulated to police detachments in other areas of Canada (e.g., Winnipeg, New Westminster, & Surrey) as well as in Trinidad and Tobago, and parts of Florida.[18] It has also been adopted by some of the

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17 The Cantonese robbery information package had to be completely redone because the printing format was originally somewhat inappropriate. And while it has not been used extensively, it is now considered appropriate. However, as noted, the demand or perceived need to introduce the program in the Chinese Community is not seen as important as introducing it in some other areas where reported robbery incidents are much higher.

18 Attempts were made to obtain feedback from these cities, but only one reply was received.

municipalities surrounding Vancouver. Both the New Westminster and Surrey RCMP detachments, use a similar RIP to that of Vancouver. The only real difference is the colour scheme or police logo. The package was put together by the RCMP.

The New Westminster Police Community Relations Department was able to distribute the package to all of their commercial and retail businesses (approximately 120) at a total cost to the department of about $700 or about $5.80 each. It took about one month for two New Westminster officers to introduce and distribute the package to all the stores. Unlike the Vancouver program, the New Westminster police visited each business separately and gave about a half hour talk on the program and the package. This was considered more appropriate by the Community Relations Unit as there are fewer stores compared to Vancouver, and there is a smaller area to cover.

In a discussion with one of the crime prevention officers in New Westminster, it was noted that the program is not oriented directly at deterring actual robbers as much as it is designed to inform the business employees about safety steps they can employ. For example, the officer interviewed pointed out that he had already received some feedback from a gas station which three days after being presented the robbery package and using the decals frustrated one attempted robber when he saw the "No $20's" decal displayed.

While no evaluation is being conducted on this particular program, the crime prevention branch of the New Westminster Police Department believes the program is a worthwhile investment. Not only do they believe that they are creating a community awareness about safety, but they feel the program also serves as a community relations builder. The officer interviewed did stress, however, that his unit was fortunate because they have their own budget to

undertake active crime prevention programs whereas other nearby departments do not.

Summary

The robbery information program has not only been utilized in the Vancouver area for some time now, but it is also beginning to be adopted or at least considered elsewhere throughout the country. Therefore, it would seem appropriate that before more widespread expansion occurs in Canada, the relative effectiveness of the program be assessed in other locations. Further, it would appear that since robberies (especially those of convenience stores) appear to be on the increase or at least remaining, one of the more popular crimes, the assessment and subsequent refinement of effective measures to curb this trend, would be useful.

IV. OCCURRENCE OF ROBBERY IN VANCOUVER

This section focuses on the breakdown of the extent of robbery in Vancouver by its eight police zones and its twenty-two Local Areas[19] (see Figures 5 & 6). Following this analysis is an examination of the extent of loss and injury incurred as a result of the robbery of convenience stores. The information presented in this section is intended to show the seriousness of robberies among convenience stores relative to other forms of robbery in Vancouver.

Methodology

Before presenting the results we will briefly describe the format for the data collection of the present study. The data were obtained from two sources: official police records and store interviews. Data collection procedures are detailed below.

Police Data

In order to identify which stores were robbed, police records and the daily police reports for robbery occurrences were coded. From these sources it is possible to identify the store, its location, date of the robbery, amount taken, number of suspects, nature of the incident, etc. Data on robberies for other types of stores and services were also gathered at this point.

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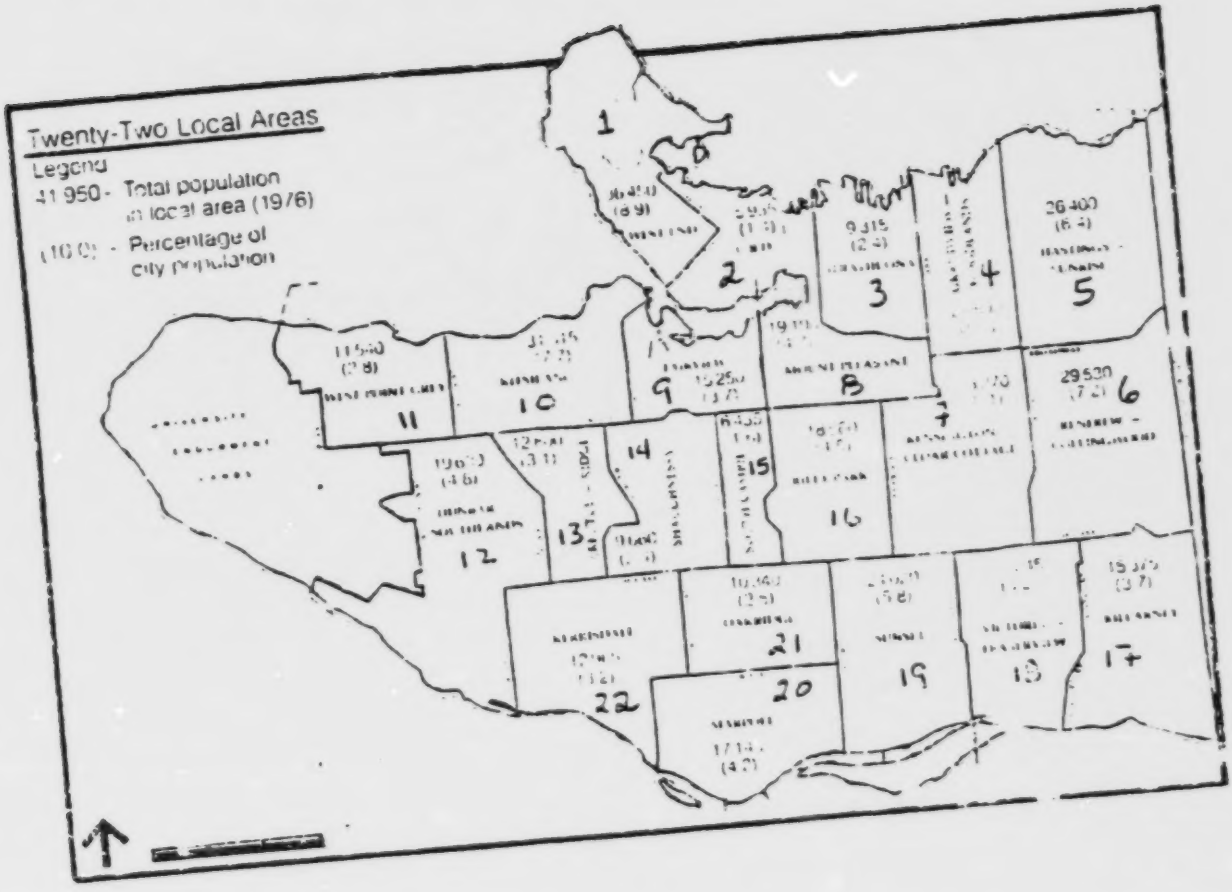
19 The robbery data are classified according to the eight police zones in the city so as to provide the police with a readily comprehendable description of the extent and nature of convenience store rates in their working areas. The Local Areas represent geographical areas designated by the City Engineering and Planning Deparment for which social housing and economic information is available. This detailed information will be incorporated in later analysis when attempting to identify the physical and/or environment variations between high and low risk robbery areas.

CITY OF VANCOUVER
City Limits
Drummond Dr
Blanca
16th Ave
Camosun
Killarney St
Fraser River
Angus Dr
Granville St
Oak Street
Burrard Street
Cambie St.
Ontario Street
Fraser Street
41st Avenue
Hanaimo Street
Broadway
Clark Dr.
Campbell Ave.
Hastings Street
Vancouver
Burrard Inlet
English Bay
Howe Street
Granville Bridge
Terminal Ave
Main
Vernon Dr.
(Effective July 1, 1982)

Figure 6


Twenty-Two Local Areas
Legend
41 950 - Total population in local area (19/6)
(10.0) - Percentage of city population
1
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Store Sample

Based on a store list provided by the Vancouver City Police and a search through the Business Directory, a list of all convenience stores in Vancouver was compiled. The list was periodically updated and revised. The most recent list is based on April, 1984 data at which time there were approximately 556 convenience stores in the city, of which 63 participated in the RIP.

From the list of convenience stores, all relevant stores in the community were notified and invited through a letter (see Appendix E) from the police or by their local business association to attend a RIP seminar. Because of the latter procedure, it was not possible to know the exact number of stores contacted. In fact, when local businesses sent out invitations, other small businesses as well as the convenience stores, attended the seminars.

Store Interviews

Based on a list of all the conveninece stores in the city, a representative sample of store owners or operators from each of the eight Vancouver police zones, were interviewed. In order to assess the effectiveness of the RIP, the sample (N=556) was divided into two major groups--RIP participants and RIP non-participants. These two groups were further divided into robbed and non-robbed stores. Within the participant group, a sample of those robbed after participating were interviewed (17 of 20) as well as sample of those never robbed (17 of 43). Because the evaluation was concerned with the effectiveness of the RIP, attempts were made to interview all those stores which had participated in the program. For the non-participant group, a sample of those robbed (41 of 194) and never-robbed (28 of 299) were also interviewed. A total of 103 (18.5% of all the convenience stores) stores were interviewed. The interviews lasted anywhere from 30 minutes to 3 hours. The interviews were conducted by a female

undergraduate student who was fluent in both English and Cantonese. This was considered necessary since approximately 60% of those stores interviewed are owned and/or operated by people of Chinese descent, a majority of whom speak Cantonese. A copy of the questionnaire is contained in Appendix A.

A. OFFICIAL POLICE STATISTICS

Frequency of Robbery Incidents

Information on the frequency of robbery incidents was based on official police records. The data were based on the time period from May 1, 1981 (approximate start date of the RIP) to May 31, 1984 (37 months).

Financial Institutions:

In each of the years for which data were obtained, financial institutions[20] had the highest average number of robberies per month, with convenience stores being the second most frequently robbed business. Over the 37 month study period, banks averaged about 14 robberies per month, while convenience stores averaged approximately 8 robberies per month. As can be seen in Table 8, the annual average monthly number steadily increased for banks while for convenience stores the number per month increased less dramatically except for a sudden increase in 1982.

Day

Saturdays and Sundays appear to be popular days for convenience store robberies (18.1% and 14.7% respectively). A relatively high proportion of the weekly robberies (16.2%) occur on Wednesdays. An analysis of the distribution of robberies between stores which did participate in a RIP and those which did not failed to indicate any marked differences between the two groups (see Figure 7).

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20 Financial institutions include banks, credit unions, trust companies and any other forms of legitimate money lending and investment institutions.

Time: Late evenings appear to be the prime time when convenience store robberies occur. Over forty-five percent of the store robberies occurred between eight p.m. and midnight. Contrary to some speculations, the early morning hours (i.e., 1-6 a.m.) account for less than ten percent of the daily robberies (see Figure 8). Due to the nature of the police data, however, it was not possible to determine what proportion of those robbed stores robbed were open 24 hours. We have, however, attempted to address this issue through analysis of the interview data which will be discussed later. It is interesting to note that one major convenience store outlet chain (A)[21] tended to be robbed later in the evening (between 9 and midnight) than the independent stores (between 6 and 10 p.m.), while another major outlet chain (B) tended to be robbed in the early morning (between 2 and 5 a.m.). Both outlet chains operate 24 hours a day.

Seasonal Trends: Examination of the breakdown of convenience store robberies by time of year (see Table 9) failed to indicate any marked variations. There did, however, appear to be some indication that during the winter months (Nov.-Jan.) there is a slight increase (average of about 10% per month) over the other months and that during the summer (June-August, average of about 6% per month) robberies are at their lowest rate. The winter months accounted for approximately 32% of the annual robberies.

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21 Because there were two major convenience store outlets in the city which had their own RIP it was felt that a separate analysis of their robbery characteristics would provide an interesting comparison. Convenience store outlet A's RIP is not well established or enforced while convenience store outlet B's RIP is highly regarded and has been proven to be successful in reducing the frequency of robbery, reducing injury and amount loss in the United States.

Police Zones: Table 10 shows a proportional distribution of convenience store robberies for each year by the eight police zones. With the exception of zones 3 and 4, no clear changes were observed over the study period. From Table 10, it can be seen that zone 5 had the highest proportion of robberies each year except for 1984, between 12% and 53% higher than any other zone in any one year. In 1983, zone 6 experienced a marked increase in robberies. Given the limited follow-up data, however, it is not possible to determine why.

Robbery Rates: In order to provide another perspective on the distribution of convenience store robberies in the city, robbery rates were calculated for the eight police zones and for the twenty-two Local Areas of the city (see Table 11). This breakdown was prepared primarily in order to help the police identify those areas of the city having the highest robbery rates, with the implication that they can consider increasing manpower in these locales, or implementing other crime prevention strategies. When the counts for the 37 month period were combined and rates calculated for the police zones and Local Areas, zone 6 had the highest robbery rate followed by zone 1 and zone 8. In general, the finding are consistent with previous studies on the location of convenience store robberies (see Duffala, 1976) which observed that convenience store robberies were most likely to occur in areas characterized by major strip development and moderate flows of pedestrian and vehicular activity.

These three zones with the highest robbery rates can be characterized as having major "strip" development, being highly residential and having main traffic arteries. Zone 1, for example, is located in downtown Vancouver with a number of streets having a large number of small businesses (see Figure 5). The zone is also characterized as being densely populated and it has a great

deal of vehicular and pedestrian traffic.[22] Zone 6, on the other hand, has a major traffic route passing through it which serves to funnel suburbanites to and from Vancouver. Along this route are located numerous convenience stores, financial institutions and small businesses. These characteristics support the observations of Duffala (1976) who found that convenience stores were more at risk when located along major strip developments. It should be noted, however, that the figures in Table 20, on store location, appear contradictory as 80% of the stores not robbed were in "strip" development. Upon closer examination of the zones it is suspected that since initial classifications were subjective the coding may have been somewhat erroneous (store location may not have been adequately operationalized).

Local Areas: Robbery rates were also calculated for the twenty-two Local Areas in the city (see Table 11). Since most of the Local Areas fit into one of the eight police zones (compare Figures 4 & 5), the finer level of analysis should allow for a more detailed level of analysis as well as more accurately identifying and explaining high risk areas for the police to more effectively focus their resources. Furthermore, the Local Area level information represents a more detailed refinement of the zone level data. This level of analysis can also be used by the CPU staff to identify, more specifically, the 'hot spot' areas within each police zone and help to apply the RIP where it might have the greatest impact.

From Table 11 it can be seen that six of the 22 Local Areas (1, 6, 7,

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22 Attempts were made to obtain vehicular and pedestrian activity counts from city Engineering and Planning but the extraction of counts for specific areas would have been very costly and time consuming and in their estimation not all that reliable. The present observations are based on subjective observations and various technical reports prepared by the engineering department during the late seventies.

8, 15 and 14) averaged approximately 1 in 4 or 24 robberies per 100 stores. The average for the 22 Local Areas was 15.9 robberies per 100 stores, per year. Not too surprisingly, Local Areas 7 and 8 are in Police zone 6, which has had the highest proportion of robberies since 1981. This relationship, however, does not consistently hold for other police zones. Police zone 8, for example, covers six Local Areas (10, 11, 12, 13, 14, 22) and the robbery rates for these areas range from 0.0 to 25.9 per 100 stores over the 37 month data collection period.

Some of the characteristics which differentiate Local Areas 7 and 8 from the low crime rate areas are that: 1) They have one or more of the city's major traffic arteries passing through them thus providing an opportunity for a lot of people to pass through the area and notice potential targets; 2) They have a fairly high concentration of schools suggesting a large number of young people who might get involved in low-risk high-opportunity type crimes. Unfortunately, due to the limited detail of this information, statistical analysis was not possible; and 3) They can perhaps best be described as being in a state of flux or "transition". That is, a great deal of change continually takes place in this area. Some residential sections are undergoing "face-lifts", new industrial areas are being constructed, part of the area supports a fairly transient population, and the residential composition ranges from one family dwellings to multiple dwellings.

Even though some of the characteristics were consistent with previous findings and offer some potential insight into identifying potential robbery areas, the characteristics themselves should not be extrapolated to those responsible for commiting the crime, this would be an "ecological fallacy" (Robinson, 1937). Rather the characteristics merely describe the type of area(s) which may be prone to robberies, not the type of individuals who do

it. It may well be, for example, that the robbers all come from outside the area (see Brantingham & Brantingham, 1984 for a review of travel patterns among different types of offenders). By contrast, Local Areas 4, 5 and 19 had comparatively lower robbery rates than the other areas, even though they each had in excess of thirty convenience stores, well above the average of 25. These areas all had major traffic routes passing through and they all had some major commercial strip development areas. Unlike the other areas, however, Local Areas 4, 5 and 19 are primarily one family or two family dwellings. The communities are considered to be well established with a fairly homogeneous group of residents. These areas like the other areas also have a high proportion of youth, but unlike Local Areas 7 and 8 do not appear to have as transient a population.

Therefore, while those areas with high robbery rates generally support the findings of Duffala (1976), they are not completely consistent as depicted by the description of the low robbery rate areas. Nevertheless, some characteristics appear fairly consistently across the literature and should be given consideration when attempting to identify those areas who might benefit most from a RIP. Later in the report we will discuss some of the individual store characteristics which correlate with being robbed or not.

Frequency of Robbery: Another aspect of the incidence of convenience store robbery is the frequency with which individual stores have been victimized. Approximately sixty-two percent of the 556 stores have never been robbed since May of 1981, while 29.8% have been robbed once, and 7.3% robbed two or three times. The balance (1.4%) have been robbed from four to a maximum of six times. Outlet chain A experienced approximately 8% (N=24) of all robberies while the other chain store outlet was the target of 10% (N=29) of the robberies. The two convenience store chains, however, only represent 8%

Figure 7
Average Distribution of Robberies by Day of Week in Vancouver: 1981–84

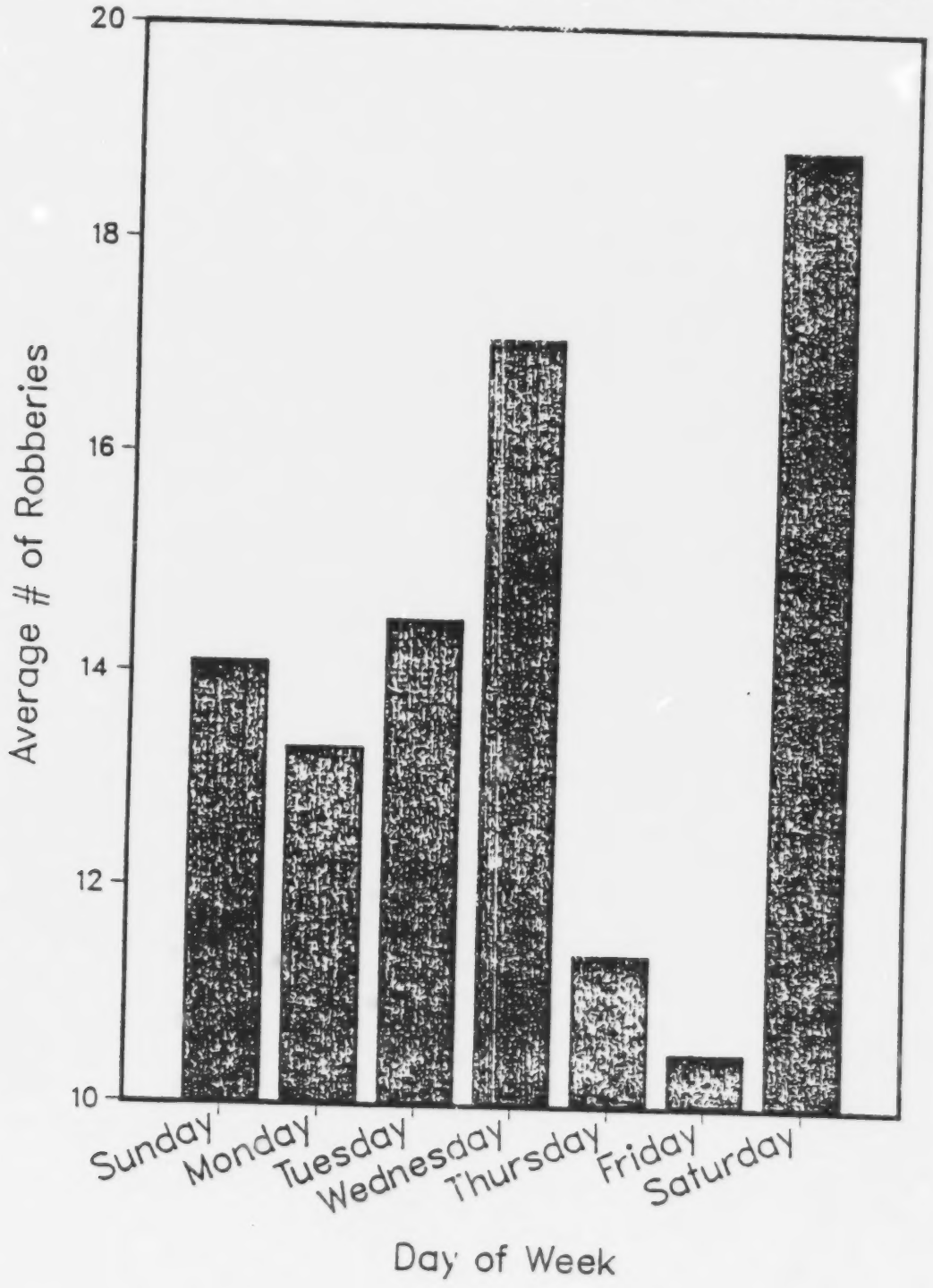


Figure 8
Distribution of Robberies in Vancouver by Time of Day: 1981–1984

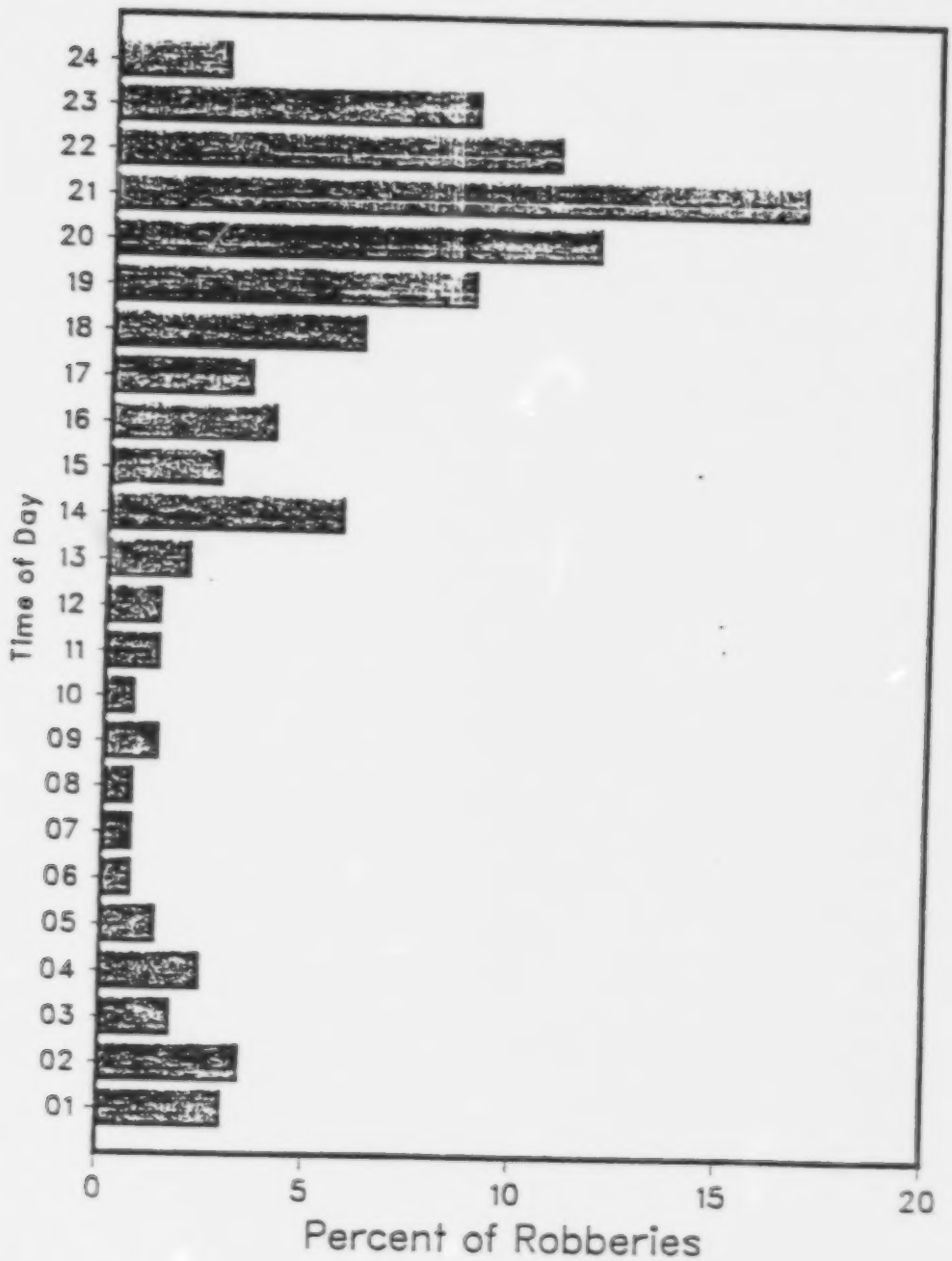


Table 9

Distribution of Robberies in Vancouver
by Month (1981 - 1984)

Month	1981		1982		1983		1984	
	N	%	N	%	N	%	N	%
January			17	12.7	9	10.7	11	29.7
February			11	8.2	10	11.9	6	16.2
March			11	8.2	9	10.7	8	21.6
April			16	11.9	10	11.9	6	16.2
May	1	2.4	9	6.7	6	7.1	6	16.2
June	5	11.9	5	3.7	2	2.4		
July	2	4.8	6	4.5	8	9.5		
August	9	21.4	5	3.7	8	9.5		
September	7	16.7	11	8.2	2	2.4		
October	4	9.5	19	14.2	1	1.2		
November	6	14.3	9	6.7	13	15.5		
December	8	19.0	15	11.2	6	7.1		
Total	42	100	134	100	84	100	37	100
Average # Per Month	5.25		11.17		7.0		7.4	

Table 10

Proportional Distribution of Convenience Store Robberies in Vancouver by Police Zones*

Police Zone	Percentage of Total			
	1981[1]	1982	1983	1984[2]
1	4.8	12.7	11.2	2.7
2	0.0	0.7	0.0	0.0
3	14.8	7.5	3.7	2.7
4	19.0	10.4	6.3	21.6
5	28.6	35.1	30.0	13.5
6	16.7	16.4	26.2	27.0
7	7.1	6.7	7.5	27.0
8	19.0	10.4	15.0	5.4
Total Number	42	134	84	37

* See Figure 3 for map of Police Zones.

1 Based on eight months of data, May 1 - December 31, 1981.

2 Based on five months of data, January 1 - May 31, 1984.

Table 11

Breakdown of Convenience Store Robbery Rates in Vancouver by Police Zones and Local Areas for the Period of May 1, 1981 - May 31, 1984[1]

Police Zone	Number of stores[2]/ Freq. of Robberies	Average Robbery Rate per 100 stores per year	Local Area	Number of stores[2]/ Freq. of Robberies	Average Robbery Rate per 100 stores per year
1	39/29	24.8	1	39/29	24.8
2	8/1	4.2	2	8/1	4.2
3	55/16	9.7	3	55/16	9.7
4	89/36	13.5	33	2/0	0.0
			4	43/17	13.2
			5	44/19	14.4
5	101/64	21.1	6	43/38	29.5
			17	5/1	6.6
			18	20/14	24.1
			19	33/11	12.1
6	109/86	26.3	7	68/57	27.9
			8	41/29	23.6
7	77/28	12.1	9	25/10	13.3
			15	5/3	26.7
			16	34/11	9.8
			20	9/2	7.4
			21	4/2	16.7
8	78/37	15.8	10	32/22	22.9
			11	8/3	12.5
			12	13/4	10.2
			13	9/1	3.7
			14	9/7	25.9
			22	7/0	0.0
Total	556/297	17.8		556/297	Avg. 15.9

Source: Official Police Investigation Reports.

1 While the list was compiled using information from the police and the business directory, the list is never completely accurate, since stores are continuously either opening, closing, or moving. In the first interim report there were 535 stores, at present there are 556.

2 This does not include a number of self-serve gas bars which may also have a convenience store. These type of operations appear to becoming quite popular in the lower mainland.

3 Local Area 3 overlaps into police zone 4 by a few blocks. This is in an industrial section and 2 stores were identified as being in police zone 4 instead of 3.

(N=44) of the known convenience store locations and yet account for 18% of the reported robberies. Their rate of robbery was considerably higher than was expected. Outlet chain A stores had experienced a robbery in over 86% of its' stores during the study period while outlet chain B stores had experienced a robbery in approximately 40% of its' stores. Both stores have a RIP but only chain B enforces its program. Outlet chain B has a store policy which requires the RPK to be displayed. This company also conducts regular employee workshops to train their staff and reinforce the importance of complying with the program. Outlet Chain A, has no set policy, they simply make the kits available.

Extent of Financial Loss: Using official daily police records, tabulations were made of the extent of loss and frequency of injuries in each year. A breakdown was also calculated for the relative dollar amount lost each year. On the other hand, Table 12 compares the amount of cash taken during convenience store robberies in each of the four years. While the RIP recommends that a cash register contain no more than $60 at any one time, and even less during the evenings, it can be seen from the table that in only slightly over a quarter of all the cases was the average loss less than sixty dollars. Thus, in about seventy-five percent of the cases, the amount lost was in excess of sixty dollars.

However, another observation to be made from Table 12 is that for 1983 there is a higher proportion of stores (approximately 27% over the study period) being robbed for less than $60, and the average loss for the incidents to date has decreased. The decrease in the approximate amounts taken is also reflected in the total amounts taken each year as well as in the median loss per robbery incident. In 1983 there had been a substantial drop in the number of stores robbed over 1982 and a significant drop in the average amounts

Table 12

Breakdown of Amounts Taken in Convenience Store Robberies by Year for Vancouver: 1981-1984

Amount Taken[2]	Year: Proportion of Year's Total[1]			
	1981[3]	1982	1983	1984[4]
Attempts (no loss)	2.4%	10.4%	12.2%	5.4%
less than $60	26.3	25.8	29.2	32.4
$ 61 - 100	14.3	11.0	9.7	21.7
$101 - 200	33.5	21.4	21.8	18.9
$201 - 500	16.8	23.5	14.5	16.2
$501 - 1000	4.8	2.1	12.0	5.4
over $1000	2.4	4.3	0 0	0.0
Approximate Total Taken	$14,168.00	$48,855.00	$15,953.00	$5,470.00
Average Loss per Incident	$ 121.00	$ 120.25	$ 100.50	99.62
Total Number of Incidents	42	134	84	37

1 Column totals may not add to 100% due to rounding error.

2 The total is based on estimates given to the police during investigation and may therefore be subject to some bias or error.

3 Based on eight months of data, May - December, 1981.

4 Based on five month of data, January - May, 1984.

taken, approximately $20 less per incident.

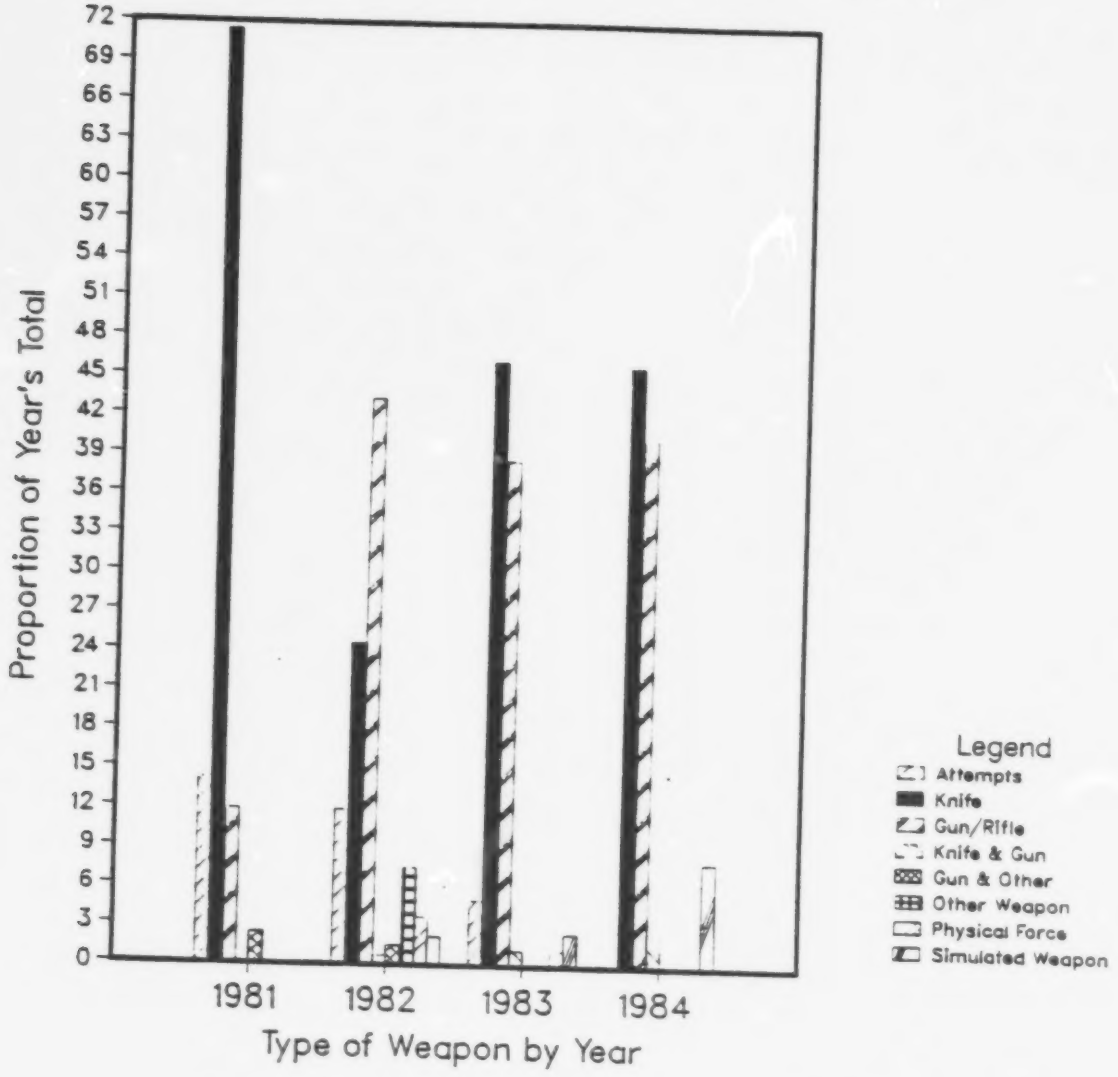
When the losses were further classified by the type of convenience store, outlet chain A stores had an average loss of $81.00; outlet chain B stores had an average loss of $49.75 per robbery incident, and independent stores an average loss of $134.50 per incident. Later we will break down the losses for independent store by whether or not they had participated in the RIP and been subsequently robbed.

Physical Injuries: The occurrence of injuries resulting from robberies during the study period was quite low. There were a total of eight injuries out of 297 convenience store robbery incidents over 37 months - less than 3% of all incidents. Outlet chain A stores had no injuries throughout the study period, while outlet chain B stores had 2 (25%) injuries and the independent stores 6 (75%) of the injuries. Four of the injuries were the result of knife attacks, one a gun wound and three injuries resulted from physical force. None of those injured in independent stores occurred in RIP participants. Since the frequency of convenience store robberies, however, remains fairly high the potential for injury cannot be overlooked. The potential for risk of injury is further supported by the fact that the use of deadly weapons has been on the increase (See Figure 9).

Weapons: Although the use of a weapon does not preclude that an injury will result during a robbery, the chances or potential is increased, especially if the victim should attempt to provoke or challenge the robber.

Knives are the most prevalent type of weapon used in convenience store robberies with firearms being a close second (39% and 38% respectively). (See Figure 9). Together these weapons are used in nearly 80% of all reported robberies. While Ciale and Leroux (1983) do not provide a detailed breakdown of what type of weapons (i.e., percent including knives or a simulated weapon)

Figure 9
Breakdown by Weapon Used in
Convenience Store Robberies in Vancouver: 1981–1984



were used in their reported convenience store robberies, it appears that firearms, as in the present study, were involved in a fairly significant number of robbery events.

Summary

The analysis of the official police data for the 297 convenience store robberies over the 37 month study period offered some interesting observations. It would appear that a number of common temporal patterns and physical characteristics exist among the robbed stores. For example, convenience store robberies tend to occur in the late evening, on weekends and during the winter months. It was also observed that robbery rates varied according to the amount of traffic flow through an area, the amount of commercial strip development and land-use patterns. The results were found to be generally consistent with previous research on convenience store robberies (e.g. Duffala, 1976). Unlike our American counterparts, however, the incidence of injury was low even though firearms and knives were used extensively.

B. STORE INTERVIEW ANALYSIS

Table 13 provides a breakdown of incidents of robbery for stores which participated and those which did not. The interviews and follow-ups began shortly after the commencement of the robbery information seminars (January, 1982) and continued until the end of December, 1984. This time period allowed for return visits to stores which might have been robbed after being interviewed. This occurred in only three incidents.

Thirty-two percent of participants and 39% of non-participants were robbed at least once during the study period (a relatively small percentage were robbed more than once). This difference was not statistically significant. Interviews conducted with owner/operators of stores that participated in the RIP does not include those stores robbed before participating, since exposure

to the program might influence their responses. An attempt was made to interview all owners/operators who had participated in the RIP. Seventeen (85%) of those robbed after were interviewed while seventeen (40%) of those not robbed were interviewed. For the staff awareness and compliance analyses, all 34 interviews from the participating group were used. For the victim response and satisfaction analyses, 17 of 20 stores interviewed and robbed after participation were used. The remaining three stores were contacted but refused to participate in the research although they had participated in the program.[24]

A total of 493 stores which had not participated in the program were identified. For comparison purposes, interviews were conducted with 69 owners or operators of these stores. Forty-one of these stores were robbed and the remaining 28 had not been robbed during the same time period as the RIP participant stores. A total of 103 interviews were conducted.

Staff Awareness and Compliance The analyses for this section were based on the 103 interviews of convenience store owners/operators. The level of awareness of program participants and non-participants about measures to take before, during, and after robbery incidents will be discussed. For program participants a separate set of items was analyzed to measure their degree of compliance with procedures advocated in the RIP. (Table 14)

Staff Awareness of Robbery Prevention/Safety Procedures The analysis for staff awareness was based on a series of "Do's" and "Dont's" that are identified on a chart in the RPK.(see Appendix F) The points on the chart

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24 Those who did not participate in the interview generally refused because they were not interested or didn't have the time.

Table 13

Participants and Non-participants in RIP by Robbery Status during Program

	Not Robbed	% of Row Total	Robbed	% of Row Total	Total
Participants[1]	43	68%	20	32%	63
Non-Participants	299	61%	194	39%	493
Total	342	62%	214	38%	556

1 Due to possible information bias of stores robbed before participating in a RIP, the interviewer during the present phase of the study, was directed toward interviewing only those stores robbed after participating or those robbed who had not yet participated. The work plan had noted that attempts would be made to interview all those stores robbed after participating and then 25 stores for each of the remaining categories.

refer to measures that should be followed throughout a robbery incident.

It was expected that convenience stores which participated in a RIP would reflect a greater awareness of appropriate measures to take during a robbery than would non-participants.[24] While none of the differences were statistically significant, given the cell sizes and skewed marginal distributions, there does appear to be a trend in the anticipated direction. (The results are summarized in Table 14). One notable finding from the interviews was that neither group felt that it was important to close the store after a robbery. Most of the stores simply felt it would be too much of an inconvenience to their customers and result in revenue loss. The vast majority in both groups indicated they would carry on business as usual. This is in contrast with what is advocated by the RIP which urges that the store be closed so as to not disturb any of the evidence and to allow the victim and any witnesses to write a description of the robber.[25] The reason cited by the interviewees included the desire not to lose any potential business and the perception that the police were usually slow to respond.

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24 Due to the fact that the RIP had begun before the study, it was not possible to obtain any baseline measures involving awareness levels.

25 Given that very few description sheets were used and the fact that clearance rates for convenience store robberies are low, it was not possible to empirically determine how much better, if at all, the descriptions provided by those who closed their stores were compared to those who did not. In conversation with members of the Vancouver Crime Prevention Unit, however, they noted that those who have participated and were subsequently robbed were generally providing more detailed descriptions. They note, however, that the improvement in descriptions has occurred primarily because the police officers have been made aware of the program and are beginning to carry extra description sheets with them and requesting more detailed descriptions.

Table 14

Comparison of Robbery Information Program Participants and Non-participants on their Awareness of Procedures to be Followed in the Event of a Robbery

Questionnaire Items	Response	Percentage of Non-Participants (N=69)	Percentage of Participants (N=34)
"Good idea to stall the robber"	Yes	41%	29%
	No*	59	71
"Do exactly what the robber says"	Yes*	97	98
	No	3	2
"Follow the robber out of store"	Yes	77	65
	No*	28	35
"Keep incident 'short and smooth'"	Yes*	97	88
	No	3	12
"Try to convince the robber not to rob you"	Yes	29	21
	No*	71	79
"Stall the robber if no weapon evident"	Yes	36	35
	No*	64	65
"Inform the robber about any surprises"	Yes*	32	45
	No	68	55
"After the robbery carry on business as usual"	Yes	91	82
	No*	9	18

*Choice advocated in the Robbery Information Program. (See Appendix F)

Program Compliance by the Stores[26] A number of questions asked of program participants were designed to test their general awareness of how to use the Robbery Prevention Kit items. In addition, the interviewer checked the extent to which the various components of the RPK were being used in the store. (Refer to Appendix A, pages 14-15 for a list of the items). It was expected that if the program is successful in impressing upon the participants the need to comply fully with the program then a majority of the participating stores should be doing so.

The participating stores surveyed seldom used all the components of the Robbery Prevention Kit (see Table 15). Of the six items which could be checked, all the items were appropriately located less that 20% of the time. The most frequently used components of the RPK (program sticker and height chart) were used by only about one-third of the participating stores. When asked why (Q. 13 pg. 15 Appendix A) they did not use the material supplied, a significant number (approximately 40%) simply replied they "didn't think it was worth it" or "couldn't be bothered". The interviewer upon further probing found that in many cases the stores were simply not well organized to begin with and that many did not really understand the purpose of the RIP.

These observations were presented to the CPU staff and discussions were held as to what changes could be made in the seminar presentations. The discussions led to an agreement that we would provide the CPU with summaries of the robbery characteristics and any important observations from the interviews as requested or seen useful. Due to a number of staffing,

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26 Compliance refers to the extent to which those stores which participated in a RIP used all the components of the RPK. Since none of the stores visited, used or put up all the items from the kit, the interpretation of the observations are subjective. No attempt was made to develop a weighting system or any other objective indicator of program compliance.

Table 15

Percentage of those Stores Participating (N=34) in the Robbery Information Program that Used the Materials Provided in the Robbery Prevention Kit by Type of Material

Questionnaire Items	Percentage (N)
Put up program sticker	31.1 (14)
"Do's" & "Don't" chart has been placed up	8.8 (4)
Put Emergency Number up	22.2 (10)
Put height chart up	31.1 (14)
Uses the "No 10's" and/or "No 20's near/in register	11.1 (5)
Witness Information Sheet placed somewhere convenient	11.1 (5)
AVERAGE COMPLIANCE RATE	19.2

administrative considerations, and stronger interests[27] expressed by financial institutions, little has been done to alter the compliance problem. A number of suggestions to address this problem will be discussed in the final section.

Victim Response to Robbery Incidents

Attempts were made to interview owners and/or operators from all those stores which had been robbed after participating in a RIP. The interviewer was able to interview staff from all but three of the twenty stores. The remaining three stores (15%) for various reasons refused to be interviewed.

This section examines how congruent the responses of victims were with what is advocated by the RIP as well as comparing the extent of loss and injury between stores robbed after participation in the RIP and stores that were robbed but which had not participated. Due to the small sample size it was not feasible to further classify those robbed after participating according to their level of compliance.

If the RIP is effective in conveying its message, then the participating group should reflect more congruency than the non-participating group, and they should have experienced fewer injuries and had a lower average amount lost per robbery incident.

Victim Response to Robberies: The responses summarized in Table 16 indicate that those stores robbed after having attended a RIP were more aware with the procedures of what to do during and after a robbery, as advocated by the RIP,

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27 While the CPU has had to initiate most of the RIP for convenience stores various financial institutions approached the police for the robbery seminars. This seems to reflect the effect of a business corporation as opposed to businesses independently operated and functioning in isolation of similar businesses.

than those who had not attended a RIP. However, the RIP group failed to use one of the most important components of the RPK — the eyewitness description forms (see Table 15). Over 70% of the respondents said they didn't bother to complete any kind of formal description beyond answering related police questions. It is interesting to note, however, that the CPU staff responsible for the RIP have commented that until quite recently most patrol officers simply were not aware, or had very little knowledge about the RIP or the RPK. So when responding to robberies they didn't even ask for the sheets.

On the other hand, the non-participant group's responses tended not to be in accordance with the measures advocated by the RIP (see Table 16). The only procedures the robbed non-participant group followed more than the robbed participant group, with any consistency, were to not follow the robber onto the street and to not talk to any witnesses who might have been in the store. This, however, may simply reflect a common-sense approach or the fact that there were no witnesses in the store. It appears, therefore, that those robbed after participating in the RIP did gain something from the RIP, as their responses tended to be more congruent with what is advocated by the RIP than were those of the robbed non-participants.

Extent of Financial Loss and Physical Injury

Injury: One person out of the interview sample (from the robbed non-participant group) was mildly injured. No medical attention was required.

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28 This awareness level is apparently changing and is discussed towards the end of this report.

29 Due to the small sample sizes no significant statistical variations were observed.

Table 16

Victim Responses to Robbery Incidents

Questionnaire Items	Response	Robbed Non-Participants (N=36)	Robbed after Participating (N=17)
"Try to interfere or resist robber"	Yes	20%	18%
	No*	80	82
"Follow robber to the door"	Yes	50	47
	No*	50	53
"Follow robber onto the street"	Yes	35	47
	No*	65	53
"Close store after the robbery"	Yes*	30	41
	No	70	59
	Don't remember	10	0
"Phone police after the robbery"	Yes*	83	100
	No	17	0
"Write description of robber"	Yes*	23	24
	No	70	71
	Don't remember	7	5
"Touch any of the evidence"	Yes	10	6
	No*	73	88
	Don't remember	17	6
"Talk to anyone in the store"[1]	Yes	3	18
	No*	93	82
	Don't remember	4	0

*Choice advocated in the Robbery Information Program.

[1] According to the official police records and interview data, in most (over 70%) of the reported cases there were no witnesses in the store at the time of the robbery.

Table 17

Comparison of Extent of Loss between Robbed Participants (N=17) and Robbed Non-participants (N=41)

Amount Taken[1]	Robbed non-participants	Robbed after participating
less than $60	17.1%	17.6%
$61-100	19.5	29.4
$101-200	22.0	17.6
$201-300	12.2	11.8
$301-400	4.9	11.8
over $400	24.4	11.8
Average Loss Per Incident	130.50	100.50

1 The amounts are based on estimates given by the store owner/manager during the interviews and may be subject to some bias.

Loss: Table 17 shows that the 'robbed after' group had a lower average loss per incident than the robbed non-participants.[30] Even though the amounts are higher than what the RIP suggest store owners keep in their cash register, the results are in the favourable direction of the program's objectives. The slightly higher average losses may be partly attributed to the fact that few stores have a safe or deposit box and must therefore keep somewhat more money around. Alternatives for handling excess money will be discussed in the conclusion of this report.

Victims' Ability to Assist the Police

It was not possible to address the ability of victims to assist the police in conducting their investigations. It was initially proposed that interviews and questionnaires would be conducted with police constables who have responded to convenience store robberies. However, after a number of discussions with the RIP staff it became apparent that this avenue of investigation would likely prove futile. In essence, it was said that very few, if any, of the investigating officers know anything about the RPK or the RIP in general.[31] It does not appear to be a priority issue. Police officers in Zone 1, however, have recently adopted the RPK and are having

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30 It should be noted that the interview sample does not include convenience stores which have their own program. We have, however, persented results of losses to chain stores earlier in this section. The information was based on police records.

31 This observation was made earlier in the study period. However, in a discussion with CPU staff at the end of the data collection period (May, 1984) it was noted that there has been a recent increase in interest expressed by a number of the patrol zones in the program and the kit. It appears, that because of the size of the police department and the fact that the CPU operates separately from those responsible for patrol, it takes time for patrol officers to become aware of it.

their patrol people distribute and discuss the kits with store staff. The officers are also encouraged to visit the stores that are presenting the kit to encourage compliance.[32]

Victims' Involvement in the Criminal Justice Process

A series of questions in the interview were asked of those who were robbed to determine whether they knew if anyone had been arrested, if they (the victim) had gone to court, and whether they were aware of any court outcome. The findings are presented in Table 18.

Even though the sample sizes for the robbed non-participating group and the robbed after-participating group are considered large enough to reflect any trends, neither group expressed any real awareness of the police and court's response to the robbery incident. Very few of those robbed were aware of whether anyone was arrested or charged. The same pattern was reflected in the victims' awareness about whether the perpetrator went to court or was convicted. Although it may be somewhat questionable to suggest that the above observations relate to the victim's ability, or lack thereof, to assist the police or courts, it can perhaps be posited that the victims actually did do all they could, but given the general clearance rate problem for convenience store robberies (see Table 3), there is little reason for the police to keep the stores informed about any lack of progress in the case. Even if more contact would increase citizen satisfaction with the police response, there is likely not enough manpower to provide such service. The observation that there is little opportunity for victims to become involved with the police or the courts is supported by police statistics which indicate that clearance rates for convenience store robberies are among the lowest of all of the

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32 Since this procedure wasn't implemented until late in the study, we were not able to assess the effect of this procedure.

Table 18

Victims' Awareness of Police and Court Response to Robbery Incidents

Questionnaire Items	Response	Robbed Non-participants (N=41) Percentage	Participants Robbed after RIP (N=17) Percentage
"Know if anyone has been arrested or charged?"	Yes	40	47
	No	8	12
	Don't know	52	41
"Know if arrested person(s) went to court?"	Yes	18	12
	No	30	41
	Don't know	52	47
"Did you appear in court for the robbery?"	Yes	17	6
	No	33	71
	Not yet	50	24
"Was the arrested person convicted?"	Yes	0	0
	No	30	35
	Don't know	70	65

robbery categories identified in Table 8. This might also account for why a majority of the respondents answered "don't know" in response to what happened after the robbery. We offer some recommendations to address this problem in the final section.

Degree of Satisfaction of Stores with Police and Court Response

This section deals with the degree of satisfaction convenience store owners/managers experienced with the police and court responses to their robbery. Comparisons on a series of satisfaction questions were made between stores robbed after attending a RIP and stores robbed but not having participated in the RIP. Again as with earlier comparisons, the same cautions are relevant.

Table 19 summarizes the responses to questions relating to degree of satisfaction with police response. It appears that both groups felt the police responded quickly (over 80%) and both groups felt the police were generally very courteous in handling the incident. However, the participants robbed after attending a RIP were not as satisfied with how well the police kept them informed, or how the police handled the robbery incident. This dissatisfaction might have occurred as a result of having participated in a RIP and having an elevated expectation of what the police can, or should do. Because they were asked to cooperate and comply with a program supported by the police, they might feel that the police are now better able to apprehend the robbers, or help the store in some way.[33]

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33 It should be noted, however, that the sample size is fairly small. More recent discussion with members of the CPU about the interest in the program suggests that now that the program has become better known there has been an increase in interest among businesses other than convenience stores.

Since only a few cases involved court appearances, it was not possible to analyze the questions dealing with court satisfaction. In over 80% of the cases where a store was robbed, the victim did not appear, or have to appear, in court. This is primarily due to the fact that few of the convenience store robbers are arrested. To date, of the 297 robberies, in less than 12% (N=33) of the cases was someone apprehended. When the names of those arrested were checked against the court records, only six (18%) of the 33 names appeared in the records. Given such a small sample, no attempt was made to analyze the data.

Table 19

Degree of Satisfaction of Victims with Police Response to Robbery Incidents

Questionnaire Items	Response	Robbed Non-Participant (N=41) Percentage	Particpant Robbed later (N=17) Percentage
"Did the police come quickly when called?"	Quickly	80	82
	Long wait	10	12
	Don't know	10	6
"Degree of courteousness expressed by police?"	Very	75	59
	Somewhat	18	35
	None	0	0
	Don't know	7	6
"Police Adequacy in keeping store staff informed about progress of investigation"	Good	45	41
	Average	30	18
	Poor	18	29
	Don't know	7	12
"Overall impression of how police handled the incident"	Good	47	41
	Average	30	41
	Poor	15	18
	Don't know	8	0

Physical Characteristics of Stores Robbed vs. Not Robbed

Of the stores interviewed there was almost a 50-50 split between stores with locations on corners and non-corners. Yet it was observed that a corner location was significantly related to having been robbed (see Table 20).

Even though there was variation between the interior of the stores (e.g., aisle pattern and height, lighting), the characteristics alone were not significantly related to whether stores were robbed or not. This is contrary to Southland's observations and Duffala's (1976) findings which observed that aisle pattern, aisle height, and interior lighting were significantly related to these characteristics. One exception was the location of the cash register, its location was significantly related to whether or not a store was robbed. If the register was close to the front of the store the lower the chances of a store being robbed. This seems to relate to internal visibility and surveillance as they were also significantly related to whether a store was robbed or not. Stores with limited interior viewing and poorly lit interiors were also more frequently robbed.

Security devices such as safes, cameras and alarm tape did not seem to matter. But, in over 70% of the cases none of the stores had these devices anyway. Mirrors were quite prevalent in most stores but were not found to be a significant factor (see Table 20). Another factor found to be related to robbery was store cleanliness. Those stores considered only "somewhat clean" to "dirty" were more frequently robbed. This observation supports one of the recommendations in the RIP that stores should appear tidy.

Table 20

Physical Characteristics of Stores
Robbed and Not Robbed

Characteristics	% of Occurrence	Robbed (N=58) Percentage	Not Robbed (N=45) Percentage
Location			
Corner	50	62	33
Non-corner	50	38	68
		(Chi square = 8.37; p .003)*	
Residential	26	45	7
Strip develop.	55	33	80
Mix resid/comm.	19	22	13
		(Chi square = 24.82; p .001)	
Window			
Limited interior view	61	72	47
Clear interior view	39	28	53
		(Chi square = 6.02; p .014)	
Aisles			
(Pattern)			
Length-ways	54	55	53
Vertical	33	28	40
No pattern	13	17	7
(Height)			
Too high	37	29	47
Readily seen over	57	66	49
Variable height	6	7	4
Cash Register			
Near front	61	50	76
To the side	31	40	20
Rear/back	8	10	4
		(Chi square = 9.60; p .002)	

Table 20 (cont)

Characteristics		% of Occurrence	Robbed (N=58) %	Not Robbed (N=45) %
Lighting				
(Interior)				
Well lit		37	24	53
Moderately lit		58	71	42
Poorly lit		5	5	5
(Outside)				
Lights on wall		57	57	55
Flood lamps		5	5	4
Street lamps only		29	26	33
No visible fixt.		10	12	7
Security Devices				
Mirror	yes	86	81	93
	no	14	19	7
Safe	yes	16	10	22
	no	84	90	78
Camera	yes	3	2	4
	no	97	98	96
Alarm	yes	35	33	38
tape	no	65	67	62
Entrance				
Front		97	98	96
Front & side		1	0	2
Front & back		2	2	2
Back only		0	0	0
Cleanliness				
Clean		35	22	51
Somewhat clean		56	69	40
Messy		8	7	9
Dirty		1	2	0
			(Chi square = 10.65; p .013)	
Parking				
Street only		93	93	93
Store front		4	2	8
Store side		1	2	0
Store rear		2	3	0

* only significant chi-square statistics are reported.

Summary

A number of comparisons between program participants and non-participants and victimized and non-victimized stores were made in this section. The comparisons involved staff awareness about measures to take before, during, and after robbery incidents; the frequency of robbery incidents for convenience stores and other stores and services; the extent of injury and loss for the stores; the responses of victims to robbery incidents and the extent to which such responses are congruent with what is advocated by the RIP; the ability of the victims to assist police and courts in the apprehension and prosecution of robbery offenders in the ways suggested by the RIP and RPK; the degree of satisfaction of convenience store owners and staff with police and court response to robbery incidents; and store characteristics of robbed stores.

From the store interviews it can generally be concluded that although RIP participants expressed a better understanding and awareness of the steps to take in the event of a robbery they did not generally comply with the RIP or the RPK. Most stores only put up one or two of the decals and made few if any alterations to thier store.

Robbed after participating stores had a noticeably lower loss per robbery incident than robbed non-participants ($100.50 vs. $130.50). There were no marked differences with respect to injuries resulting from the robberies. The store operators were reluctant to close the store or fill out description sheets, if they had any. [34]

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34 This may not reflect a lack of knowledge of the correct procedure. It may be, however, that they simply do not want to close and attract attention or frighten away their customers and thus lose potential business

Robbery victims generally felt that the police were quick to respond to their call, and were generally courteous. Participants were not as satisfied as non-participants with how the police handled the robbery incident. Robbery victims also felt that once they had reported the robbery very seldom were they called to court or did they hear about the outcome of the case. Therefore, their ability to assist the police seemed quite limited. Even though few convenience store robbers are caught some suggestions to improve business-police relations are offered in the final section.

Finally, comparison of non-robbed and robbed store characteristics showed that some of the factors identified by Duffala (1976) also related to whether stores in the present study were robbed. These observations lend further credence to the belief that certain environmental factors may act as precipitating cues for target selection and thus support the potential use of the RIP and RPK.

While the findings in this report do not lend conclusive support to the program they do suggest that if the program were properly applied and compliance enforced it would be more effective. Some steps which can be taken in this direction are addressed in the final section.

V. RECOMMENDATIONS AND FUTURE DIRECTIONS

Established management practices dealing with robbery (as well as other forms of crime, e.g., shoplifting and employee pilferage) are notably lacking among most independently owned convenience stores.[35] The lack of safety protection programs has, in part, been reflected in the number of convenience stores which have been victimized (e.g., see Table 8). While the actual amount of monetary loss may appear considerably less than that for banks or other businesses, proportionately the sums are substantial when one considers the volume of store sales.[36] Furthermore, the potential risk of injury, both physically and emotionally, cannot be discounted given the prevalent use of deadly weapons. Therefore, crime (robbery) prevention efforts can play a useful role for convenience stores in minimizing their risk of being victimized.

Any crime prevention investment, on behalf of small businesses, should consider: "(a) the immediate cost of crime and the savings to be realized, and (b) the effect in discouraging future crimes (Kingsburg, 1976:230).

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35 Franchise convenience stores such as Mac's and 7-Eleven however, as noted earlier, do tend to have established employee programs for store security and general management practices.

36 Kingsbury (1976:237) notes that: "in the order of magnitude of ordinary crimes, robbery represents the smallest loss, falling significantly below shoplifting, employee theft, fraudulant checks, and burglary." Unlike the other crimes, however, robbery entails a greater potential for personal injury to the employee(s) and store patrons.

The RIP represents an attempt to help convenience store owners[37] to address their potential of being robbed by making some simple and easy physical modifications to their businesses. These steps have been proven successful for chain stores (e.g., Southland Corp.). The cost to the stores is negligible since the packages are free upon attendance at the RIP seminar and store modifications can also be kept fairly simple - removing posters from windows, keeping shelves low, keeping the money in the till at a minimum, etc.

Unfortunately, compliance with the program, for those who attended a RIP, was somewhat disappointing. Rationales for the failure to comply abound. But rather than focus on the negative attributes of the compliance issue, we will instead offer a number of recommendations which might enhance compliance rates in the future.

Dealing with Program Compliance

In order to enhance compliance among small business operators it is important to be able to create a level of awareness which would serve to convince them that compliance is important.[38] To raise their level of awareness the following factors should be considered:

1. Through the use of pictures, graphs, and actual accounts during seminars, inform the businesses about their risk of being robbed. The awareness program would include noting how long hours of operation, poor interior

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37 The recommendations refer primarily to independently owned convenience stores as most of the franchise stores in the city have their own well established programs.

38 Many small businesses employ family members, or are run as if employees were family. Owners and members sometimes find it difficult to accept that one or more of their employees may be dishonest or that their business is worth robbing. Kingsbury (1976:230) notes that: "the smaller the store and the smaller the community, the less the effort is being applied to store security."

visibility, the amount of readily available cash, and how being alone represent prime opportunity cues for would-be robbers.

2. Attendance at the seminars and total compliance with the RPK should be associated with concrete rewards/incentives for the store owners. This could take the form of a certificate, special insurance rates, a letter of support from the police and/or mayor. Special insurance rates are available to those with safe driving records; those who make limited use of their vehicles; those who have fire detection devices in their homes; and those who do not smoke, therefore, it would seem practical to offer special insurance options to businesses based on a series of steps they could take to reduce their risk of victimization. This report has identified some simple environmental and store characteristics which could be considered.

3. In addition to the seminars, distribute information leaflets throughout the community informing the public about the program. While some community radio and television stations participated in Vancouver, it might have been useful to have the major radio and television stations help in informing the public. The educational program could also act as a possible general deterrent.

4. Through the use of a handbook, offer small businesses general information about legal protection available to them, with respect to shoplifting, employee theft, burglary, bad cheques, false arrests, and robbery. This booklet should be made available where appropriate in languages other than English, (e.g., French or Cantonese).

5. Make available regular bulletins informing patrol officers as well as senior police officials about the robbery program so that when they respond to a convenience store robbery they will ask for the eyewitness

description sheets and refer to the height chart. Senior police officials (e.g., Superintendents for each zone) should also be presented with information concerning the program and the importance of police participation. All 'awareness' efforts would be further reinforced by having a senior police person (e.g., Chief of police) support the program.

6. Consideration might be given to having patrol officers occasionally visit stores which have participated to check on the placement of the RPK items and offer some encouragement. If some of the decals are damaged or worn out they could arrange for new ones.

7. While many of the older established stores cannot afford to make all the physical alterations recommended, an inventory might be created which would identify what could be done - e.g., increase interior lighting, remove window posters, keep store clean and tidy, or reduce business hours.

8. Consideration should be given to having the city or town create a by-law which stipulates that certain environmental design aspects be considered for any new convenience stores. If similar regulations can be made regarding fire code regulations and the use of alternate exits for other businesses, then such measures could be established for convenience stores. These would represent long term benefits to the stores and result in fewer tax dollars going to police investigations.

9. For businesses which participate in the program, attempts could be made by local business associations to offer special group rates on special security devices such as the Tidal safe system used by Southland Corp. or the installation of functional video cameras.

The list of recommendations which could be offered are only limited by the resources and desire to tackle the problem of convenience store

robberies. The Vancouver study suggests that the biggest problem which needs to be overcome is compliance. Most of the recommendations offered herein have attempted to address this issue. It is evident from the recommendations that obtaining compliance will not be easy and should not rest solely on the shoulders of those who deliver the program. As with most crime prevention efforts, an effective program requires the involvement of police, community, insurance agencies, and business associations, as well as any other related support systems/institutions.

Primary crime prevention strategies represent a relatively new and highly viable approach to addressing certain crime problems. We cannot, however, approach the problems with less than a total commitment. This commitment would also involve ongoing evaluation and assessment of any measure taken.

We will now turn our attention to a consideration of future research in the area. A number of the following recommendations for further research are based on some of the perceived limitations of the present study. Although we feel the present study has provided some insight into the nature and extent of convenience store robberies in one major metropolitan city of Canada, as well as assessed the quality and usefulness of the RIP, there are a number of areas and issues that should be pursued.

FUTURE RESEARCH

Interview Apprehended Convenience Store Robbers: The primary emphasis of the present study was an examinination of whether a robbery prevention program could reduce the incidence of convenience store robberies as well as reduce financial losses and personal injury to store personnel and possible witnesses if a store was robbed. Through analysis of official police statistics and store interview data attempts were made to identify which aspects of the

robbery program and which environmental factors related to varying robbery rates in the city. Thus, the focus has been primarily on environmental issues as they relate to the robbery of convenience stores.

In general, we believe that it would additionally be useful to interview convicted convenience store robbers. While strong correlates may be found between environmental factors and the probability of a robbery, it was not possible to explore the rationales of why convicted robbers robbed a particular store, nor was it possible to examine the extent to which robbers are cognizant of the environmental issues which the program stress, or what their initial motivations were, their awareness of potential consequences, relevance of their choice of modus operandi, etc.[39]

The present study suggests that convenience store robbers are generally young males (about 24) who operate alone and late at night (between 7 - 11 p.m.). Although we were not able to substantiate it, we do not necessarily believe that those who rob convenience stores represent a specific type of individual (i.e., an offender typology -- for further discussion of criminal typologies see Gibbons, 1977). We do, however, believe that for those who commit such crimes there may be some issues which could contribute to the understanding and reduction of robberies other than environmental factors. If, for example, one ex-con was able to help identify "weak spots" of convenience stores from an environmental perspective (i.e., as in the case of Ray Johnson and Southland Corp.), then it would seem reasonable that interviewing a number of such individuals might shed further light on the problem.

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39 Similar interviews have been attempted for "robbers" in general (see, Cook, 1983; Feeney & Weir, 1973; Letkemann, 1973), but none for convenience store robbers.

Interview 'Potential' Robbers: One issue which we would have liked to address is to ask (regular) store patrons about their awareness of any store security measures. For example, for those stores which complied with the program are customers aware of the door decals, what do they think about them, do they notice the height chart, do they have any suggestions to improve the program, etc? Information from these interviews would help to identify those aspects of the program which are perceived as important and/or readily recognized by the customer. It might well be that the door decals should be more noticeable or that store locations should be more restricted and regulated.

More Detailed Official Record Keeping: At present, official crime statistics do not differentiate between types of robberies. Statistics Canada simply aggregates all robberies into one category.[40] It would be useful for research, and program development, to breakdown robberies by their type. In the U.S., the UCR provide data on financial institutions and convenience store robberies as well as estimated losses. Such data, at a local level, would be useful in establishing base rates, determining crime patterns and for observing any crime displacement effects. With the growing acceptance and sophistication of computer technology, it seems quite feasible to revise our data collection procedures so as to make them more amenable to detailed crime analyses.

Eyewitness Identification Study: The RIP relies fairly heavily on the ability of a potential robbery victim to be able to accurately identify and recall the robber. Part of the seminar and RPK include some basic training in how to use the eyewitness identification sheet. In fact, the sheets have been designed so that they can be used as evidence in Court. The forms and training procedures thus play an important role in the effectiveness of the program.

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40 For example, we were not able to readily obtain any base rate data on convenience store robberies prior to the start of the RIP.

Due to the relatively slow acceptance of the program and lack of awareness by most patrol officers that stores which had participated in the RIP had the eyewitness description forms, it was not possible to determine how effective they were. The police never, until recently, asked for them and the victims never volunteered them. The police could provide a description form at the time of the interview and ask the victim to fill it out.

We believe that a separate analysis of the usefulness of the forms would be fruitful. Past research has shown that controversy exists over whether or not it is possible to enhance peoples ability to recall (criminal) events (see Lloyd-Bostock & Clifford, 1983; Loftus, 1979; Yarmey, 1979). Most of the studies, however, were conducted in laboratory settings and have generally used non-threatening or non-violent situations. But research has demonstrated that stress is an important inhibiting factor in one's ability to recall (Loftus, 1979; Yarmey, 1979).

Given this situation, it would be interesting to use this program to collect and test the usefulness of the forms in identifying and apprehending offenders. A simple comparison between the descriptions and actual offenders would provide evidence about the quality of the descriptions. In addition, it would be interesting to use the forms and test recall ability under different training techniques (see, for example, Woodhead et al. 1979). Recent evidence suggests that the technique used in the program may not be the best (Loftus, 1979).[41] Testing the usefulness of the forms and experimenting with different training techniques could lend a great deal of insight into maximizing the usefulness of an important component of the RIP.

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41 The program uses a composite approach based on Penry's (1971) model but Baddeley & Woodhead (1983) suggest that a "holistic" training approach may be more effective. This suggestion is in sharp contrast with what has traditionally been accepted.

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APPENDIX A

ROBBERY INFORMATION PROGRAM QUESTIONNAIRE

Robbery Information Program
(Items Asked Of Everyone)

##. Person Interviewed: _____.

##. Time & date: _____.

##. What is your position in the store? (circle most senior position).

1. Owner
2. Manager

##. Compared to other areas in Vancouver, do you think the neighborhood around your store is an area with a high amount of crime, an average amount of crime or a low amount of crime?

1. High
2. Average
3. Low
4. Don't know

##. Compared to other areas in Vancouver in the last year or two, do you think that crime has increased, decreased, or remained about the same in the neighborhood around your store?

1. Increased
2. Decreased
3. Same
4. Don't know

##. In the last year or two, do you think that crime in general has increased, decreased, or remained about the same in Vancouver?

1. Increased
2. Decreased
3. Same
4. Don't know

##. How do you think the amount of crime in the neighborhood around your store compares with the rest of the Vancouver region. Would you say your neighborhood has...

1. Much more crime
2. More crime
3. About the same
4. Less crime
5. Much less crime
6. Don't know

##. Do you think there is a serious crime problem in the neighborhood around your store?

1. No
2. Yes
3. Don't know

##. What is the most common type of crime problem in the neighborhood around your store? Is it...(pick only one)

1. Personal safety (robbery, assault, etc.)
2. Property loss (break-ins, theft, etc.)
3. Vandalism
4. Disturbing the peace (noisy parties, etc.)
5. Drugs and alcohol
6. Prostitution
7. Other i.e., juvenile delinquency (specify) _____.

Do you think that the local police force does a good job, an average job, or a poor job...

	Good Job	Average Job	Poor Job	Don't Know
##. Of enforcing the laws?	1	2	3	4
##. Of promptly responding to calls?	1	2	3	4
##. Of being approachable and easy to talk to?	1	2	3	4
##. Of supplying information to the public on ways to reduce crime?	1	2	3	4

##. What steps, if any, have you taken to make your store safer? (check all that apply)

___a. Sale counter made more visible
___b. Windows cleared
___c. Video installed
___d. Other: _____.

##. Do you do anything else to try and increase store safety or deter potential robbers? Please describe.

_____

_____

_____

_____

(Rev 83-03-10)

##. Is there a safety deposit box or drop-safe in your store?

1. Yes
2. No

##. Do you have any security alarms on your premises?

1. Yes
2. No

##. Does your store have insurance for liability, merchandise and recovery loss?

1. Yes the store has insurance
2. No the store has no insurance
3. Don't know.

##. Do you usually keep, or try to keep, a minimum amount of cash in your register each day?

1. Yes
2. No

##. How much ? $_____.

##. How much money do you think is in the cash register right now? $ _____.

##. COUNT AND CHECK HOW CLOSE YOU WERE
1. Within $30 of guess
2. Over $30 of guess
3. Under $30 of guess

##. Do you ever remove any excess cash to lower the amount in your register?

1. Yes
2. No

DO YOU DO THIS...

##. During the day 1. Yes 2. No

##. At night 1. Yes 2. No

IMAGINE YOU WERE BEING ROBBED. THEN RESPOND TO THE FOLLOWING QUESTIONS. DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS.

##. It is a good idea to stall the robber, the longer they have to wait for the money the less likely they will stay.

1. Agree
2. Disagree

##. You should do exactly what the robber says.

1. Agree
2. Disagree

##. You should follow the robbers carefully out of the store to get a description of them and possibly their car, and direction of travel.

1. Agree
2. Disagree

In case of a robbery do you think it is important to:

##. You should keep the robbery "short and smooth".

1. Agree
2. Disagree

##. You should try to convince the robber not to rob you.

1. Agree
2. Disagree

##. You should try and stall the robber if he/she doesn't have a weapon.

1. Agree
2. Disagree

##. You should tell the robber about any possible surprises such as someone coming from behind or into the store.

1. Agree
2. Disagree

##. You should carry on business as if nothing has happened.

1. Agree
2. Disagree

##. Is your store?

1. Independently owned and operated, or
2. A franchise store
3. Other (specify): _____.

##. Have you or someone else changed the store's layout in the past year or so in any way to make it appear less opportune to robbers or shoplifters?

1. Yes
2. No
3. if yes what did you do? _____.

##. How many people usually work in the store during the daytime (i.e., 8 - 4)?

1. 1
2. 2
3. 3
4. more--how many:_____.

##. How many people usually work in the store during the evening (after 5 p.m)?

1. 1
2. 2
3. 3
4. more--how many:_____.

##. Are there different staff on duty in the evening than during the day?

1. Yes
2. No

##. What are your days and hours of operation?

Day	Hours
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

##. What would be your average sales on a week-end?_____

##. What would be your average sales on a week day?_____

##. What would be your average sales on a weekday this time of year?

_____.

##. Do you know what the police Emergency number is?

1. 9-1-1
2. 9-11
3. Don't know
4. Incorrect (what number did they offer, if any?) _____.

##. How long have you worked in this store?

1. Less than 1 year
2. 2-3 years
3. Over 3 years.

##. How old are you? _____.

##. Sex_____.

##. Are you employed with the store?

1. Full-time
2. Part-time

##. When do you usually work?

1. Almost every day - all day
2. Almost every day - day time only
3. Almost every day - nights only
4. Part-time - days
5. Part-time - evenings
6. Other (specify): _____.

##. What level of education have you completed?

1. Some elementary
2. Some high school
3. Some technical college
4. Some university
5. No formal education

##. What is your marital status?

1. Never married
2. Married/common law
3. Widowed
4. Separated/divorced

##. Has your store been robbed since the beginning of 1981? (Whether or not you were present).

1. Yes
2. No

##. Have you ever been the victim of a robbery while working in your store?

1. Yes
2. No

Robbery Information Program
(Items For Those Who Were Robbed)

##. When were you last robbed?_____. [probe for exact date]

##. How many times have you been robbed since January 1981? _____

##. In the most recent robbery how were you robbed? (Were you robbed while...).

1. threatened with knife
2. threatened with gun
3. threatened with some other weapon
4. verbal threat only
5. hit, kicked, slapped, or knocked down
6. Other (specify) _____

_____.

##. How long do you feel the (most recent) robbery lasted?

1. Less than 1 minute
2. 1 to 3 minutes
3. 3 to 5 minutes
4. More than 5 minutes
5. Don't know

##. How did you feel while being robbed? _____

_____

_____.

##. Did you speak to the robber at all?

1. No
2. Yes
3. Don't remember

##. If so, what did you say?

_____

_____

_____.

##. Did you try to resist or interfere with what the robber(s) wanted?

1. Yes 2. No 3. D/k

##. Did you follow the robber(s) to the door for any reason?

1. Yes 2. No 3. D/K

##. Did you follow the robber(s) to the street for any reason?

1. Yes 2. No 3. D/K

##. Were you injured during the robbery?

1. Yes
2. No

##. What were the injuries you suffered, if any? (mark all answers that apply)

1. None
2. Knife wounds
3. Gunshot wounds
4. Broken bones or teeth knocked out
5. Internal injuries, or loss of consciousness
6. Bruises, black eye(s), or scratches
7. Cuts
9 Other (specify) _____

_____.

##. Did you receive any medical or dental attention after the attack?

1. Yes
2. No

##. Have you filed a claim to receive compensation for the injuries you suffered?

1. Yes With whom did you file the claim?
   3. Compensation Board of British Columbia
   4. Insurance Company
   5. Other (specify) _____.
2. No

##. How many offenders were involved in the robbery?

1. _____(number)

2. Don't know

##. What was the sex of the offender (* if more than one offender, repeat the question).

Suspect 1	Suspect 2	Suspect 3
1. Male	1. Male	1. Male
2. Female	2. Female	2. Female
3. Don't know	3. Don't know	3. Don'tknow

##. How old would you say offender (number 1) was?

1. Under 10 years old
2. 10-13
3. 14-17
4. 18-20
5. 21-24
6. 25-29
7. 30-39
8. 40-49
9. 50 and over
10. Don't know

##. How old would you say offender (number 2) was?

1. Under 10 years old
2. 10-13
3. 14-17
4. 18-20
5. 21-24
6. 25-29
7. 30-39
8. 40-49
9. 50 and over
10. Don't know

##. How old would you say offender (number 2) was?

1. Under 10 years old
2. 10-13
3. 14-17
4. 18-20
5. 21-24
6. 25-29
7. 30-39
8. 40-49
9. 50 and over
10. Don't know

##. Did you know this person?

1. Yes (go to Q ##)
2. No (go to Q ##)
3. Don't know

##. If yes, how well did you know him/her?

1. Know by sight only
2. Casual acquaintance
3. Well known

##. At the time of this incident, do you think that any of the robber(s) were under the influence of alcohol or drugs?

1. Alcohol
2. Other drugs
3. Not sure whether alcohol or drugs
4. No
5. Don't Know

##. Did you do any of the following after the robbery?

##. Close the store? 1. Yes 2. No 3. D/K

##. Phone the police? 1. Yes 2. No 3. D/K

##. Write a description? 1. Yes 2. No 3. D/K

##. Touch anything that could have been used as evidence? 1. Yes 2. No 3. D/K

##. Ask witnesses to stay? 1. Yes 2. No 3. D/K

##. Talk to anyone in the store? 1. Yes 2. No 3. D/K

##. What was the total value of the cash taken?

$_____.00

1. Don't know

##. Did you have insurance against theft?

1. Yes
2. No
3. Don't know

##. How much was recovered from insurance?

1. $_____.00

2. Don't know

##. What was the extent of the contact you had with the police? (Mark all that apply).

1. None
2. Telephone call
3. Personal contact on one occasion
4. Personal contact on more than one occasion

##. Given the circumstances of the incident, did the police come as quickly as you thought they should have? That is, do you think they did a good job of responding promptly?

1. Responded quickly
2. Had to wait a long time
3. Don't know

##. In general, for this incident, were the police very courteous, somewhat courteous, or not at all courteous?

1. Very courteous
2. Somewhat courteous
3. Not at all courteous
4. Don't know

##. Do you think the police have done a good job, an average job, or a poor job of keeping you or your store informed of the progress or outcome of the investigation?

1. Good- keep informed
2. Average- only initially informed
3. Poor- never informed
4. Don't know

##. Overall, do you think the police have done a good job, an average job or a poor job of handling this incident?

1. Good
2. Average
3. Poor
4. Don't know

##. Was anyone arrested or charged as a result of the incident?

1. No
2. Yes
3. Don't know

##. Did the arrested go to court as a result of the incident?

1. No
2. Yes
3. Don't know

##. Have you had to appear at a court hearing or trial in relation to this case?

1. No
2. Yes
3. Not yet

##. Was/were the offender(s) convicted?

1. No
2. Yes
3. Don't know

##. Were you satisfied or dissatisfied with the courtesy of the following court officials?

		Satisfied	Dissatisfied	Don't know
1.	The judge/magistrate	1.	2.	3.
2.	The prosecuting lawyer	4.	5.	6.
3.	The defence lawyer	7.	8.	9.

##. If the defendents(s) was/were sentenced, were you satisfied with the sentences imposed?

1. Yes
2. No

##. If no, why were you not satisfied?

1. Sentence too lenient
2. Sentence too severe
3. Don't know what the outcome was.
4. Other (specify) _____

_____.

Robbery Information Program
(Items For Those Who Attended RIP)

The following questions are meant to help us to identify what aspects of the Robbery Information Program (seminar) you attended recently have been useful for you. Please note there are no right or wrong answers and that all responses will be strictly confidential. It is also important you answer all the questions. Please feel free to ask any questions as we go through the survey.

##. Did you find the presentation

1. Too long
2. Too short
3. About right

##. How well were you able to understand the presentation? Did you understand

1. Most of it
2. Some of it
3. Or none of it

##. Why did you attend the Robber seminar?

_____

_____

_____.

##. Now that you have participated in a Robbery Information Program meeting, would you suggest to other business people that they do so too?

1. Yes
2. No
3. Maybe

##. How do you think we might get more people to attend the presentation?

_____

_____

_____.

##. Have you put up this program sticker? (check visually first) .

1. Yes
2. No
3. If not, why not:_____.

* Some general questions about the store.

##. Have the police come by to check and see if you have put up any of the robbery prevention stickers?

1. Yes
2 No

##. Have you placed these charts up where the people who work in your store can read them? (ask to be shown).

1. Yes
2. No
3. If not, why not: _____.

Interviewer describe where it is _____

_____.

##. Have you put this Emergency Number sticker by the telephone in the store?

1. Yes
2. No
3. If not, why not: _____.

##. Have you put this Height Chart next to the exit door in your store? (check visually first).

1. Yes
2. No
3. If not, why not: _____.

##. Have you used these red "No 10's" and "No 20's" stickers in (or on) the cash register? (show me)

1. Yes
2. No
3. If not, why not: _____.

##. Where do you keep the Witness Information Sheet? (ask to be shown).

1. Near cash register/ check desk
2. Do not use
3. Other location, where:_____.

##. Why have/or haven't you used the material from the robbery package?

_____

_____

_____.

##. Have you or anyone else explained to the other people working in the store how to use the identification sheet?

1. Yes
2. No

##. Would you be willing to attend another Robbery Information Program meeting like this at a later time to refresh your memory of procedures to be followed in the event of a robbery?

1. Yes
2. No
3. Maybe
4. Don't know

##. Do you think there is a need to hold other meetings like this for other businesses in this area?

1. Yes
2. No
3. Maybe
4. Don't know

##. Do you think there is a need to hold other meetings like this for other businesses elsewhere in Vancouver?

1. Yes
2. No
3. Maybe
4. Don't know

Robbery Information Program
(Items Asked Of Those Not Attending RIP)

##. Had you ever heard about the Robbery Information Program?

1. Yes
2. No

##. If yes, what do you know about it?

_____

_____

_____

##.a) Were you ever invited to attend a Robbery Information Program?

1. Yes
2. No

##. If yes, why didn't you go?

_____

_____

##. Would you be interested in attending a presentation in your area?

1. Yes
2. No
3. Undecided

Checklist of Physical Characteristics of Store

Characteristics

##. Store Location a)
1. Corner
2. Non corner

b)
1. Primarily residential area
2. Located along a strip development; commercial area.
3. Mix of residential and commercial activity.

##.Number of surrounding commercial activities (From the store front, how many other businesses have a clear uninterrupted view of the store?)

_____.

##. Window
1. Limited interior viewing
2. Clear interior viewing

##. Aisles (pattern)
1. Run length-ways facing cashier
2. Run vertical to cashier
3. No set pattern

(height)
1. Most aisles are too high (i.e., over 5 Ft.) to see over
2. Most aisles can be readily seen over
3. Variable height

##. Merchandise
1. Mostly produce
2. Variety (tobacco, magazines, cards, candy; minimal food)
3. Mixture of produce and other merchandise
4. Other (describe)_____

##. Cash Register
1. Located near front entrance
2. Located off to the side of store
3. Located near/towards the back of the store

##. Lighting-(interior)
1. Well lit (bright)
2. Moderately lit
3. Poorly lit (dull)

(outside)
1. Lights on building wall
2. Flood lamps around building
3. Only lighted by street lamps
4. No visible lighting fixtures around the store

##. Security Devices

Mirror	1.	yes
	2.	no
Safe	1.	yes
	2.	no
Camera	1.	yes
	2.	no
Alarm tape (around the doors/windows)	1.	yes
	2.	no

##. Entrance

1. Front only
2. Front and side
3. Front and back
4. Back only

##. Cleanliness

1. Very clean
2. Somewhat clean
3. Messy looking
4. Dirty and "smelly"(poor maintenance)

##. Parking

1. Street parking only
2. Some store parking -front
3. -side
4. -rear

##. Comment (any peculiarities about the store, staff, neighborhood (i.e. Italian, Chinese section) or general location, or comments the store owner made, etc.):

_____

_____

_____

_____

_____

##. Comment: Spend about 10 minutes observing the street and note how many people go in and out of the stores and more generally how much pedestrian movement there is on the street. Note the time of your observation.

_____

_____

_____

APPENDIX B

ROBBERY PREVENTION PROCEDURES

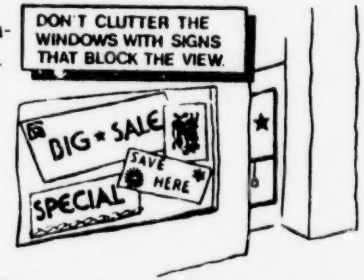
Robbery Prevention Procedures

While potential robbers are still deciding whether or not to rob the store, you can often turn them away by doing things they don't like or that disappoint their hopes. The idea is to unnerve nervous would-be robbers.

STEP 1 — LOOK SAFE!

Give the Store a Look that Says — "We Are Vigilant."

A half-asleep clerk in a sloppy store invites would-be robbers. To them, a careless scene means that you must be careless, too, with money. To discourage them, you should:



- Get out from behind the counter when the store is empty.
- Keep the store clean.
- Keep the store uncluttered.
- Keep the store well stocked.
- Keep active. Your activity will turn away some robbers simply because it would take too much time for them to get you back to the cash register. Robbers prefer brief robberies.

STEP 2 — SPOTLIGHT CRIME!

Put the Robber on Stage

Robbers don't want to be visible from outside. They don't want a policeman who may be passing by to see them with gun in hand holding you up.

- After dark, when most robberies occur, block off "hot spots" where robbers could stand without being visible from outside.

Ask your employer about nighttime changes in the locations of the store signs or displays that may block the visibility of the cash register area from outside the store. ☐

STEP 3 — MONITOR DANGER!

Keep a Sharp Lookout at all Times

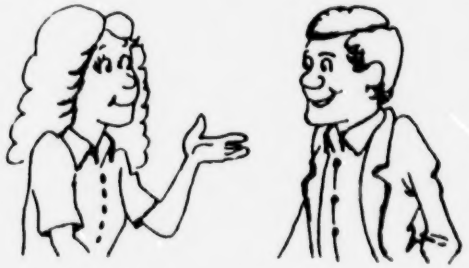
- From time to time, look at likely "casing" places, such as outdoor phone booths or cars parked either across the street or in the lot, but off to one side.
- Observe whether anyone seems to be watching or loitering.
- Try to "stare down" anyone who is watching or loitering.
- If the person still doesn't leave, call the police. Tell them where you are and what you see. Doing it openly may scare away the person. The police welcome such calls, and they often pay off.

STEP 4 — BE IN CHARGE!

Greet Each Person Who Comes into the Store

A robber doesn't want to be identified. It's safer to rob strangers, with as little human contact as possible.

- Give everyone a friendly greeting.



- Look each customer directly in the eyes. Such human contact will spoil it for some would-be robbers. It decreases their element of surprise, threatens them with the possibility of being identified later, and makes it hard for them to loiter in the store and watch you secretly.
- Keep a friendly eye on each customer.

- Be especially suspicious of young males, those wearing garments that could conceal weapons, those who come in without having parked a car where you can see it, and those who loiter over a trivial item, perhaps waiting for you to be alone.

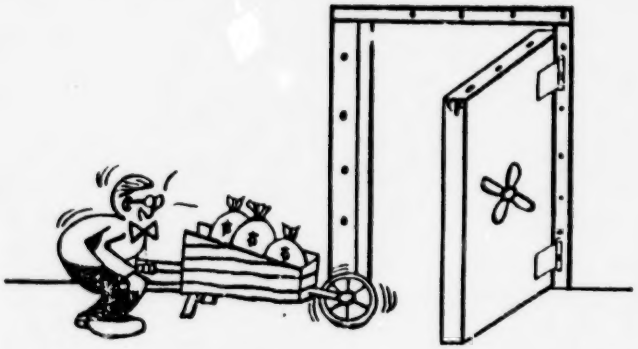
- Ask the customer ahead of a suspicious person, "Are you together?" This usually causes the customer to turn around and look at the person. Because robbers don't want to be identifiable, this trick may scare them off.

- If you are alone with a suspicious person, leave the counter on an errand in the store and say, "I'll be with you in a minute."

STEP 5 — REDUCE CASH!

Limit Money in Cash Register

Keep as little money in the cash register as possible, especially bills; let the world know it! Unless you let them know otherwise before they start to rob you, robbers will expect a big score.



- Put all $20 and $10 bills into a drop box or floor safe as soon as you get them. Do so publicly.

- Tell your customers why you are making the drop — "To make the store less attractive to potential robbers."

  Such action will educate the public, including would-be robbers, that robbing stores is no longer worth risking imprisonment for.

- While "casing" your store before a robbery, would-be robbers look into the cash register while it's open during a sale. If they see only silver and small bills, they aren't likely to rob you.

STEP 6 — THE SECOND STORE!

Special Late Night Steps

Most store robberies occur after dark. At that time you should take special steps to make the store a less attractive target to would-be robbers.

- Keep the amount of money in the cash register at the absolute minimum. Many stores operate with less than fifty dollars total between two registers.

- You can run a store on very little money if you request customers to pay for their purchases with the smallest possible bill and with the exact change if they can. If you need any particular denomination of money, ask your customers. They can help you.

- Minimize the available cash by putting large bills in a safe or drop box as soon as you get them.

- Be certain all outside lights are on and working.

Ask your employer the minimum amount of money to keep in the register after dark. The minimum amount for my store is $_____. ☐

STEP 7 — HONEST IS SAFETY!

Don't Lie to Robbers

- Fake security devices and signs don't help. Robbers soon learn to ignore them.

- Follow the Robbery Prevention Steps carefully and make sure your fellow employees observe them, too. Failure to do so may also endanger someone else in another store.

APPENDIX C

IN CASE OF ROBBERY DESCRIPTION SHEET

IN CASE OF ROBBERY

NOTIFY POLICE AND FILL IN THE BLANKS. GIVE THE TOP COPY TO THE FIRST POLICE OFFICER ON THE SCENE. RETAIN THE SECOND COPY FOR YOUR OWN FILES.

SEX	AGE	HEIGHT	WEIGHT	RACE
MALE ☐ FEMALE ☐				WHITE ☐ BLACK ☐ OTHER ☐

HAIR
BLACK ☐
BROWN ☐
BLOND ☐

EYES

GLASSES TYPE

TATTOOS

SCARS/MARKS

COMPLEXION

HAT (COLOUR/TYPE)

TIE

COAT

SHIRT

TROUSERS

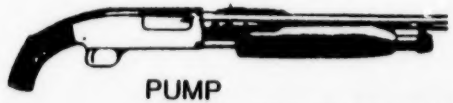
SHOES

AUTOMOBILE DESCRIPTION (LICENSE NUMBER, MAKE, COLOUR)

COMMON WEAPON TYPES

LEVER
SAWED-OFF RIFLE

LONG BARREL
REVOLVER



PUMP
SAWED-OFF SHOTGUN

LARGE
AUTOMATIC

OR OTHER WEAPON USED:

Facial Appearance

WRITE BELOW SPECIFIC FACIAL DETAILS, ONLY THOSE YOU DEFINITELY REMEMBER.

WHAT DID THE ROBBER SAY?

LOCATION:

YOUR NAME: TIME:

SIGNATURE: DATE:

HOW TO REACH YOUR POLICE
PHONE:
EMERGENCY:
NON EMERGENCY:

STAY ON THE PHONE!
DON'T HANG UP!

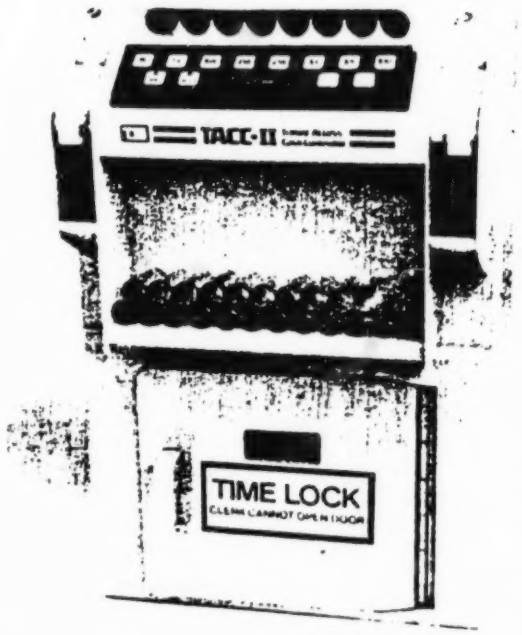
VANCOUVER POLICE

APPENDIX D

TIMED ACCESS CASH CONTROLLER

TIDEL SYSTEMS

TACC Timed Access Cash Controller



Here's How It Works . . .

- Reduces cash in your register
- Large denomination bills may be dropped in the side slots as in a drop-safe.
- Makes surplus cash retrievable through pre-set time delay
- Rolls of coins or bills are placed in high-impact resistant plastic tubes and deposited in openings at the top of Timed Access Cash Controller.
- A microprocessor lets employees "withdraw" tubes of cash at pre-set time intervals.
- Only one "withdrawal" is possible during each time-delay cycle. The delay may be adjusted so that it is not too long to inconvenience customers or clerks but long enough to deter a robber.
- The TACC-II unit may also be tied-in with a silent alarm system and ID camera.
- Improves employee morale
- Improves customer services

A money handling system that takes away the only advantage a hit and run robber has — TIME!!

Increased Cash Control Reduces Cash Loss • Less Cash Allows for Less Cash Manipulation

Specifications:

- Steel cabinet completely encloses stored cash and electronic components
- Capacity for eighty-eight cash storage tubes
- Two "drop-slots" for large bills and checks
- Microprocessor time-delay system which controls "withdrawal" of cash and the door time-lock
- The "two-key" feature means that the time lock can not be actuated and the steel door can not be opened without both keys.
- Optional mounting platform raises Cash Controller 4 inches off of floor
- Optional vend tube locking bar keeps employees from putting empty tubes into change fund.
- Optional messenger key allows bank deposits by contract courier.
- Technical specifications:

  Operates on 110 volts AC

  Low current consumption

  Designed to fit under a standard height counter

  Unit may be bolted to the floor for added security.

  Available in your corporate colors

  Size: 21" wide, 33" high, 17¾" deep

  Weight: 340 lbs.

OPTIONS

- Cash Controller, TACC II
- Cash Controller with Alarm Option
- Cash Controller with Messenger Key Option
- Cash Controller with Alarm and Messenger Key Option
- Mounting Platform
- Vend Tube Locking Bar
- Courier I

TIDEL SYSTEMS
A DIVISION OF THE SOUTHLAND CORPORATION

2615 E. Beltline Rd.
Carrollton, Texas 75006

National Sales 1-800-527-7491
Additional Listings on Back

APPENDIX E

LETTER OF INVITATION

VANCOUVER

POLICE DEPARTMENT: 312 Main St., Vancouver, British Columbia, Canada V6A 2T2, Tel. (604) [illegible]

R. J. Stewart
Chief Constable

VANCOUVER POLICE DEPARTMENT

INVITES

ALL RETAIL MERCHANTS

TO A

ROBBERY PREVENTION SEMINAR

ADMISSION: F R E E

DATE: January 11th, 1983 - Tuesday

PLACE: Killarney Community Center
6260 Killarney Street
Banquet Room

TIME: 7:30 - 8:30 p.m.

Robbery Prevention Kit will be supplied to merchants attending.

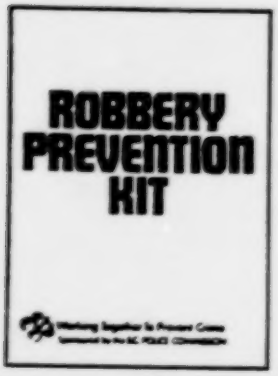
For further information call Shoplifting Detail - 665-2207.

APPENDIX F

CONTENTS - ROBBERY PREVENTION KIT

CONTENTS
ROBBERY PREVENTION KIT

The contents of this kit should be placed throughout the store in accordance with the guidelines below. The kit folder, fill in the blanks, and emergency phone numbers should be kept in a standard location.

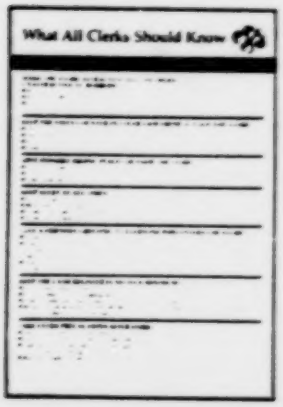


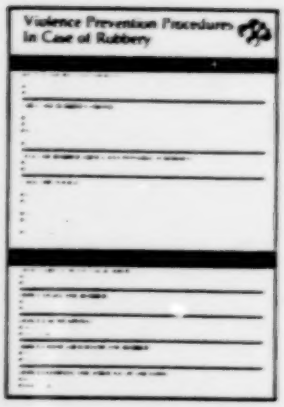
Kit Folder

One per kit.

Size: 9" x 12" folded.

Placement suggestions: In a standard location.





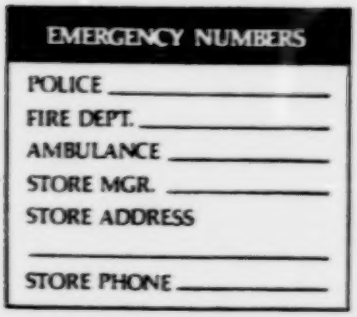
Robbery Prevention Standards Decal
Robbery Prevention Procedures Decal

One each per kit.

Size: 12" x 17".

Placement suggestions: In restroom or between restrooms.

Application instructions: Clean a smooth and flat area for the signs. Remove the protective paper backing gradually while squeegeeing the sign into position with a credit card or similar tool.



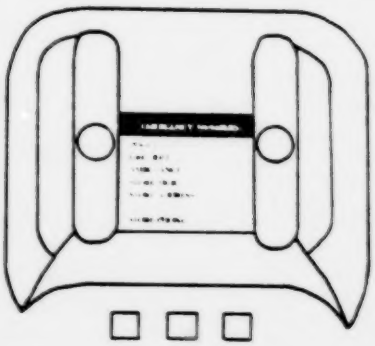
Emergency Numbers Decal

One per kit.

Size: 2" x 2".

Placement suggestions: On or near phone.

Application instructions: Clean the area. Remove the protective paper backing. Firmly rub into position, using credit card, taking special care to get edges down tight.



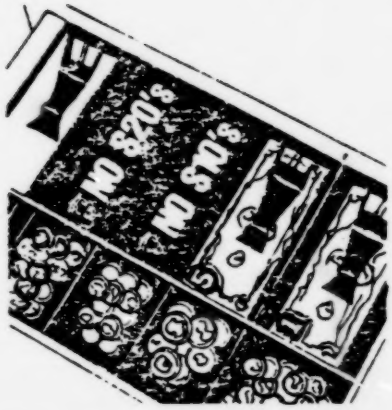
No $10's and No $20's Decals

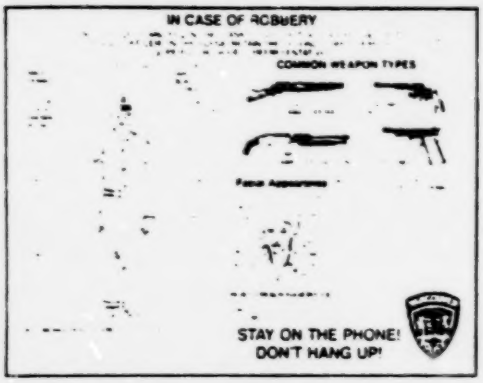
Two each per kit.

Size: 6⅛" x 2⅝".

Placement suggestions: In appropriate till spaces.

Application instructions: Clean the area. Remove protective paper backing. Firmly rub into position, using credit card, taking special care to get the edges down tight.





In Case of Robbery Form

Five per kit.

Size: 8½" x 11".

How to use: Fill in the blanks description form to be filled out by clerk after robbery and given to police.

Measuring Gauge

Two gauges per kit.

These gauges will allow clerk to accurately estimate robber's or suspicious person's height.

Placement instructions: Inside door frames.

Application instructions: Clean the area. Remove inch or so of backing paper from top of sign only. Align to door, making sure 6-foot mark is at the proper height. Remove rest of backing paper. Using credit card, apply gauge.

Push-Pull Decals

One each per kit.

Size: 11" x 4".

Placement instructions: On inside of doors, place decals so that the sides with adhesive backing face outside the store. Decal A should be placed on left-hand door, positioning it so that its right-hand edge is against door frame and its bottom edge is approximately 2" above crashbar. Decal B should be placed on right-hand door in the same way.

Application instructions: Thoroughly clean the glass. Remove part of the backing paper. Apply the exposed adhesive using credit card. Gradually remove the rest of the backing while applying the decal.